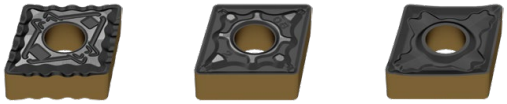
New products for machining technicians

NEW

Steel machining with the new ISO-P grades



Thanks to a CVD multilayer coating with the latest Dragonskin coating technology, the indexable inserts are ideally suited to versatile steel machining. In combination with a balanced carbide base substrate, the new grades in the ISO-P category boast a wide application area with improved wear resistance. Depending on the cutting conditions, the perfect cutting material can be selected from three grades.

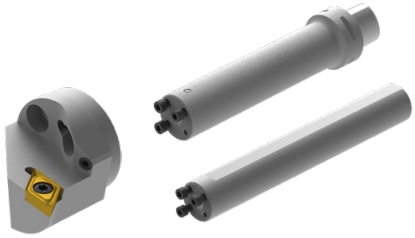
NEW

-M23 chip breaker

Soft cutting geometry with excellent Chip breaking behavior at low cutting depths for steel machining. Available for positive round inserts in the ISO-P carbide grades.

NEW

MaxiChange – Exchangeable head system



The new actively vibration-dampened basic holder for demanding internal turning operations. Available with the Machine interface PSC, HSK-T and cylindrical shank.

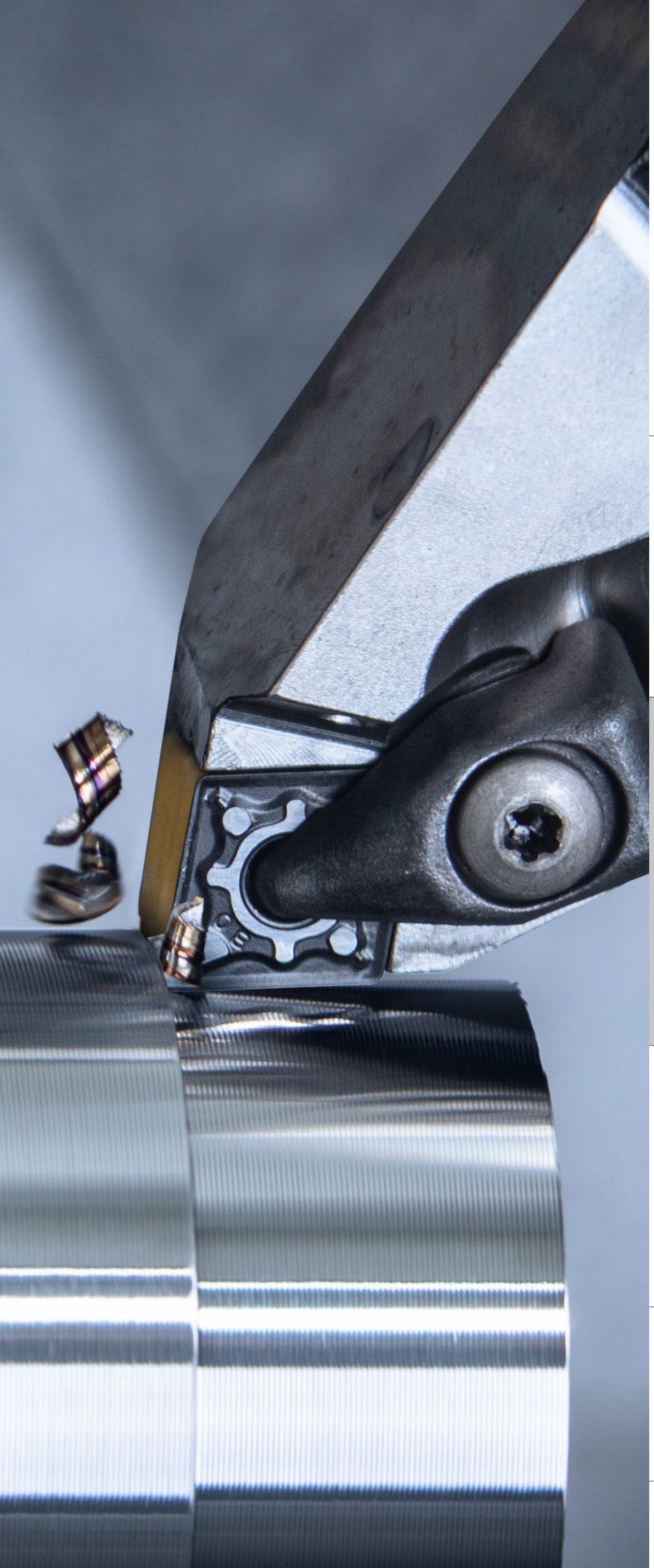


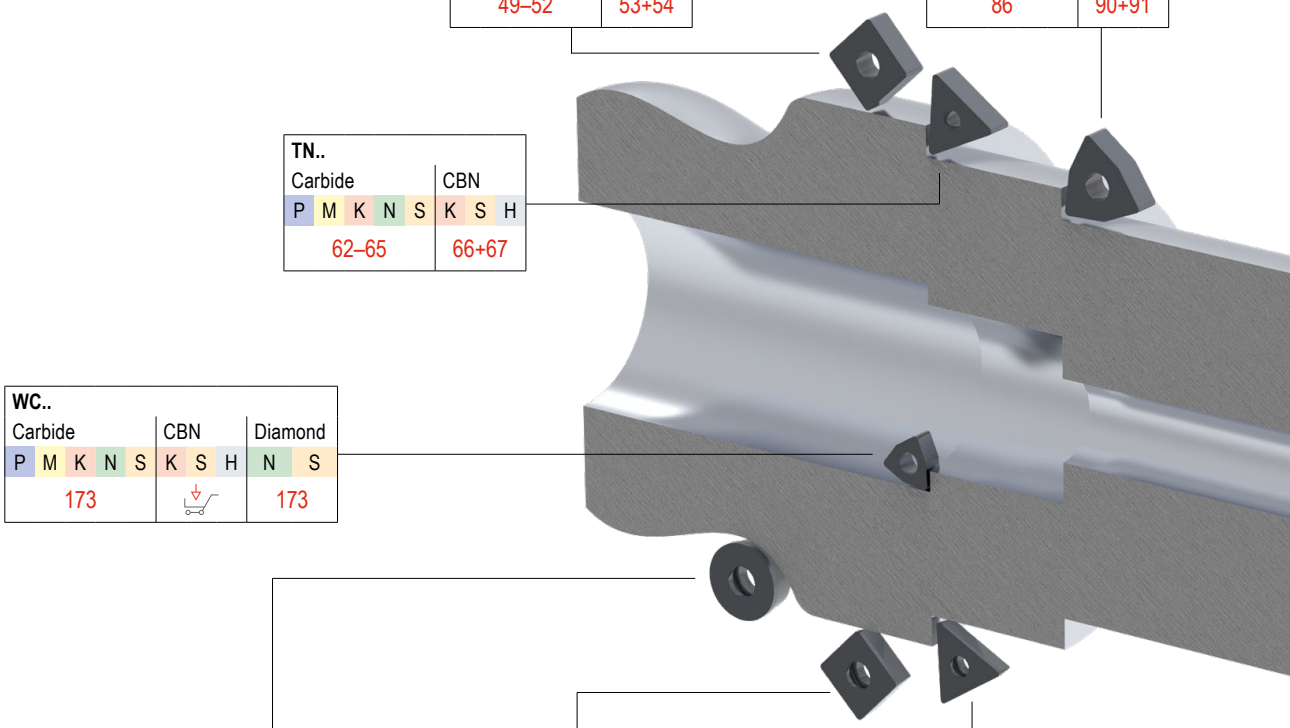
Table of contents

CERATIZIT \ Performance

Premium quality tools for high performance.

The premium quality tools from the **CERATIZIT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

Toolfinder – Application



Symbol explanation

CTCP125-P *Carbide Grade*

F	Fine Machining
M	Medium Machining
R	Rough Machining

Smooth cut
Irregular cutting depth
Interrupted cut

Internal coolant supply

Direct Cooling — DirectCooling

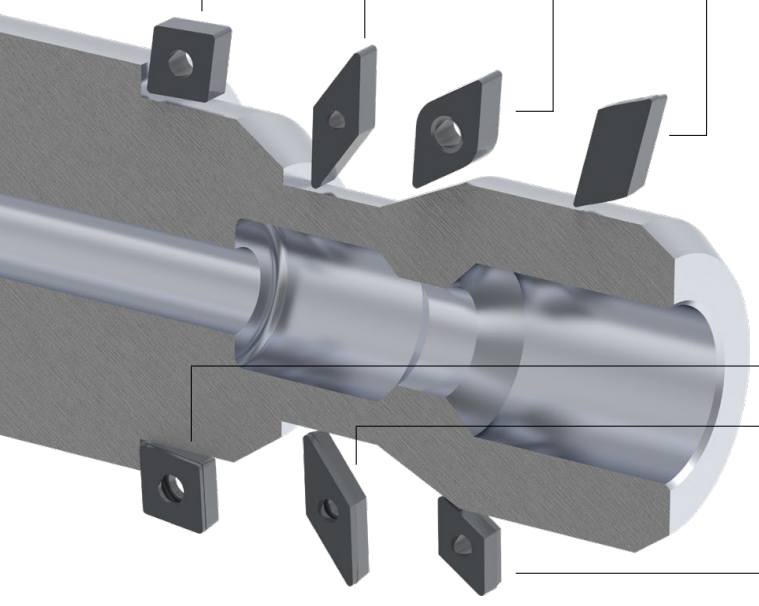
A detailed overview of grades can be found in the technical appendix on → **page 232**

Hard turning with PCBN indexable inserts

cts.ceratizit.com/en/us/pcbn-indexable-inserts

The tool selection for Sliding head machines

cts.ceratizit.com/en/us/sliding-head-turning



CN..										
Carbide						CBN			Diamond	
P	M	K	N	S	K	S	H	N	S	
11–16					17+18			19		

DN..										
Carbide						CBN			Diamond	
P	M	K	N	S	K	S	H	N	S	
31–34					35+36			37		

VN..										
Carbide						CBN				
P	M	K	N	S	K	S	H			
77+78					79+80					

KN..					
Carbide					
P	M	K	N	S	

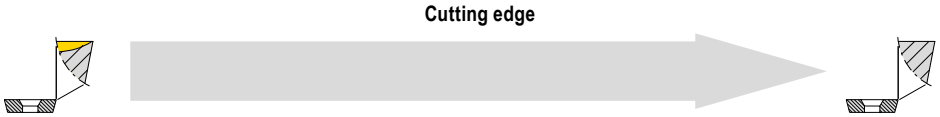
CC..										
Carbide						CBN			Diamond	
P	M	K	N	S	K	S	H	N	S	
96–99					100–102			103–107		

VC..										
Carbide						CBN			Diamond	
P	M	K	N	S	K	S	H	N	S	
156–159					160–162			163–165		

DC..										
Carbide						CBN			Diamond	
P	M	K	N	S	K	S	H	N	S	
113–117					118–120			121–125		

This article can be found in our online shop at cuttingtools.ceratizit.com

Chip Breakers Overview



			Sharp			medium		stable		
			5	10	20	30	40	50	60	70
increasing wedge angle	fine	F	-F05 -CF05	-SF -23P	-CF / -CF20	-F30 -SMF	-F34 -F40 -TFQ	-F50 -CF55		
	medium	M		-M23	-25P -25Q -M25	-XU -M30 -SM -SMQ	-M34 -M40 -TMQ	-M42 -M50 -M55	-M60	-M70 -NMA
	rough	R			-27	-29		-R28	-R58	-R88

Grade description

C T C P 1 2 5 -P (Example)

CT
CERATIZIT

-P
Performance

Degree of hardness

05	ISO 05
10	ISO 10
15	ISO 15
20	ISO 20
25	ISO 25
30	ISO 30
35	ISO 35
40	ISO 40

Application

1	Turning
2	Milling
3	Grooving
4	Drilling
5	Thread turning
6	Others
7	Several processes

Main application – material

P	Steel
M	Stainless steel
K	Cast iron
N	Non-ferrous metals
S	Heat-resistant
H	Tempered steel
O	Non-metal materials
X	Universal application

Coating

W	Uncoated carbide
C	CVD-coated carbide
P	PVD-coated carbide
T	Cermet, uncoated
E	Cermet, coated
N	Silicon nitride, uncoated
M	Silicon nitride, coated
S	Mixed ceramic
K	Whisker ceramic
I	SiAlON
D	PDC
B	PcBN
H	HSS sintered

Toolfinder – negative inserts

				Steel	Stainless steel	Cast iron	Non-ferrous metals	Heat-resistant	Tempered steel	Non-metal materials	Geometry						
				P	M	K	N	S	H	O	CN..	DN..	KN..	SN..	TN..	VN..	WN..
Main application: **Steel and cast iron**	Sharp – stable	Fine	-CF / -CF20	●	○	○					11	31			62		86
			-F40	●		○										77	
			-F50	●		○					11	31		49	62	77	86
			-TFQ	●	○	○					11+12	31+32					86
		Medium	-XU	●		○					12	32				77	87
			-M40	●		○										77	
			-M50	●	○	○					12+13	32		49	62	77	87
			-TMQ	●		○					13	32					87
			-M70 | -11, -12	●	○	○					13+14	33		50+51	63		87
		Rough	.NMA	●	○						14	33		50+51	63		88
			-R28	●	○	○					14	33		51	63		
			-R58	●	○	○					14+15	33+34		51	63+64		
			-R88	●	○	○					15			51			
Main application: **Stainless**	Sharp – stable	Fine	-F30	○	●			○			15	34		52	64	77	88
		Medium	-M30	○	●			○			15	34		52	64	78	88
			-42	○	●			○			16						
			-M42	○	●			●			16	34		52	65		88
			-M60	○	●			○			16	34		52	64		88
			-M70	○	●			○			13+14	33		52	65		89
Main application: **Heat-resistant**	Sharp – stable	Fine	-F32		●		○	●									
			-F34	○	●		○	●			16						89
		Medium	-M34	●	●		○	●			16	34		52	64	78	89
			-M42	○	●		○	●			16						
			-M52		●		○	●									
Main application: **Non-ferrous metals**		Diamond	FN , FL, FR				●			●	19	37					

This article can be found in our online shop at cuttingtools.ceratizit.com

Toolfinder – positive inserts

				Steel P	Stainless steel M	Cast iron K	Non-ferrous metals N	Heat-resistant S	Tempered steel H	Non-metal materials O	Geometry CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Main application: **Steel and cast iron**	Sharp ↕ stable	Fine	-CF05	●	○	○					96	113		138		145		156	
			-SF	●	○	○					96–98	113–115		138		145		156+157	173
		Medium	-CF55	●	○	○					96	113		138		145		156	
			-M23	●		○							133						
			-SMF	●	○	○					96+97	113+114	132	138		145		156+157	
			-SM	●	○	●					97+98	122+123	132+133	139		146		157	
			-SMQ	●		○					97+98	115							
			-EN, -EL, -ER	●	○	●													
Main application: **Stainless**	Sharp ↕ stable	Fine	-F43	○	●			○			98	115				146			
			-M81	○	●			○											
		Medium	-M25	○	●			●			98	115		139		146		157	
			-M55	○	●			●			98	115		139		146+147		157+158	
Main application: **Non-ferrous metals**	Sharp ↕ stable	Fine	-23P			○	●			○	98	116							
		Medium	-25P	●	●	○	●	●		○	98	116	133	140				158	
			-25Q	●	●	○	●	●		○	99	116						158	
			-27	●	●	○	●	●		○	99	116	133	140		147		159	
			-29			○	●			○	99	117						159	
		Diamond	-FN , -FL, -FR				●			●	103–107	121–124	134	141+142		151+152		163	173
			CB1				●			●	104+107	122–125	134	141		151		164+165	
			CB2				●			●	104+107	122 124+125	134	142		152		164+165	
			CB3				●			●	106	124+125		142		152		165	
Main application: **Heat-resistant**	Sharp ↕ stable	Fine	-F05	●	●		●	●			99	117						159	
			-F23		●	○	○	●											

This article can be found in our online shop at cuttingtools.ceratizit.com

Toolfinder – holders

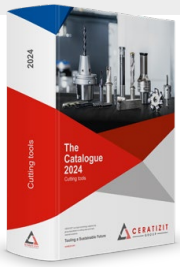
Toolholders and boring bars for negative inserts

Geometry	Tool holder	Boring bars	HSK-T	PSC
CN..	20–25	28+29	26	27
DN..	38–40	47+48	41–43	43–46
SN..	55–60	61	60	
TN..	68–74	61		
VN..	81+82	85	81	83+84
WN..	92+93	95	93	94

Toolholders and boring bars for positive inserts

Geometry	Tool holder	Boring bars	HSK-T	PSC
CC..	108	108	108+109	109+110
DC..	126	130	127	128+129
RC..	135+136		136+137	
SC..	143	144		
TC..	153+154	155		
VC..	166+167	171+172	167–169	169+170
WC..	metric	metric		

metric Additional metric items are available in our Online-Shop at cuttingtools.ceratizit.com and in the metric main catalog.



MaxiChange – Overview of the product range

Exchangeable heads

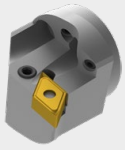
Turning Tools

For negative inserts

PCLN 95°

183

PDUN 93°



183

PDQN 107,5°

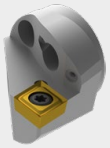
184

PWLN 95°

184

For positive inserts

SCLC 95°



185

SDUC 93°

185

SDQC 107,5°

186

NEW

SVPC 117,5°

186

NEW

SVUC 93°

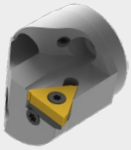
187

NEW

SVQC 107,5°

187

For internal thread



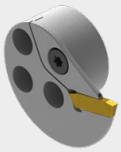
188

Grooving Tools

For radial grooving

NEW

GX 16

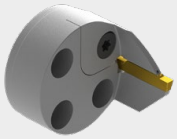


→ Chapter 11

For axial grooving

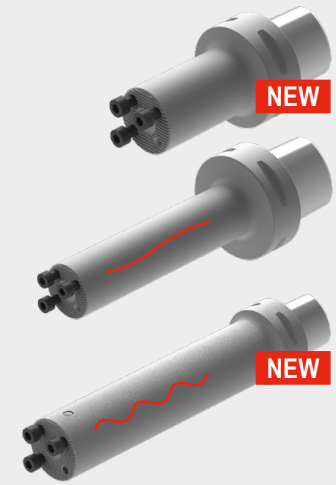
NEW

GX 24



→ Chapter 11

Tool holder



PSC

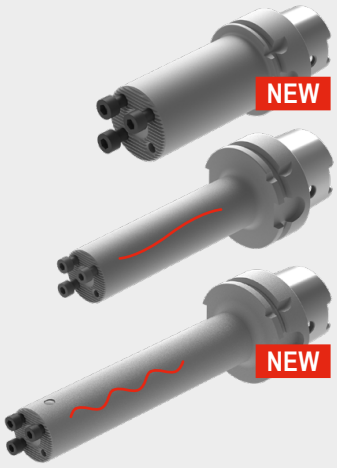
174

Vibration damped

175

Actively vibration-damped

176



HSK-T

177

Vibration damped metric

Actively vibration-damped

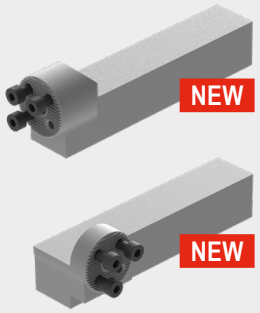
178

Cylindrical shank

179

Actively vibration-damped

180



Square shank holder 0°

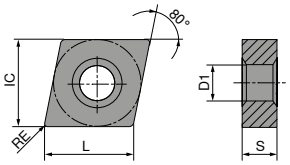
181

Square shank holder 90°

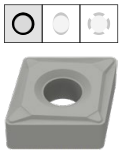
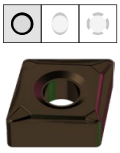
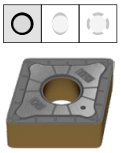
182

CNMG / CNMA / CNMM

Designation	L inch	S inch	D1 inch	IC inch
CNMG 32..	0.3819	0.1252	0.1500	0.3748
CNM. 43..	0.5079	0.1874	0.2032	0.5000
CNM. 54..	0.6339	0.250	0.2500	0.6248
CNM. 64..	0.7598	0.250	0.3126	0.7500
CNMM 86..	1.0158	0.3748	0.3591	1.0000

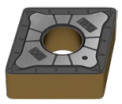
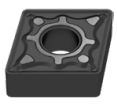
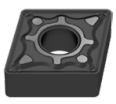
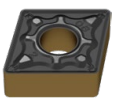
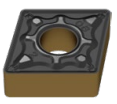


CNMG

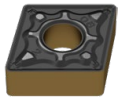
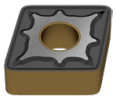
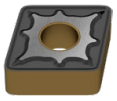
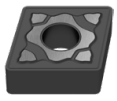
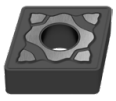
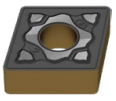
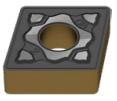
		NEW	NEW	NEW	NEW
	-CF TCM10	**-CF20** CTEP110	**-TFQ** CTEP110	**-F50** CTCP115-P	**-F50** CTCP125-P	**-F50** CTCP135-P	**-TFQ** CTCP115-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	**F**	**F**	**F**	**F**	**F**	**F**
	CERMET CNMG	**CERMET** CNMG	**CERMET** CNMG	CNMG	CNMG	CNMG	CNMG
	70 101 ...	**76 101 ...**	**76 110 ...**	**76 132 ...**	**76 132 ...**	**76 132 ...**	**76 110 ...**
ANSI RE inch							
321EN 0.0157				**31601**	**51601**	**71601**	
322EN 0.0315				**31801**	**51801**	**71801**	
431EN 0.0157	**904**	**028**	**028**	**32801**	**52801**	**72801**	**32801**
432EN 0.0315	**908**	**030**	**030**	**33001**	**53001**	**73001**	**33001**
433EN 0.0472			**032**	**33201**	**53201**	**73201**	**32001**
P	●	●	●	●	●	●	●
M	○	○	○			○	
K	○	○	○	○	○		○
N							
S							
H							
O							

9

CNMG

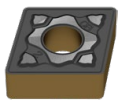
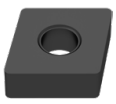
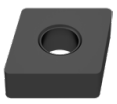
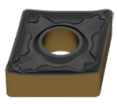
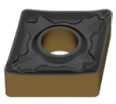
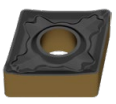
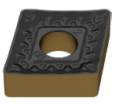
		NEW	NEW	NEW			NEW	NEW
		-TFQ CTCP125-P	-XU CTCP115-P	-XU CTCP125-P	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115-P	-M50 CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	M	M	M	M	M	M
		CNMG	CNMG	CNMG	CNMG	CNMG	CNMG	CNMG
		76 110 ...	76 290 ...	76 290 ...	70 132 ...	70 132 ...	76 135 ...	76 135 ...
ANSI	RE inch							
431EN	0.0157	52801	32801	52801	028		32801	52801
432EN	0.0315	53001	33001	53001	030	530	33001	53001
433EN	0.0472	53201	33201	53201	032	532	32001	53201
434EN	0.0630						33401	53401
542EN	0.0315						34201	54201
543EN	0.0472						34401	54401
544EN	0.0630						34601	54601
P		●	●	●	○	○	●	●
M								
K		○	○	○	●	●	○	○
N								
S								
H								
O								

CNMG

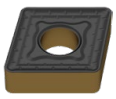
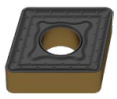
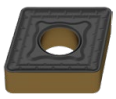
		NEW	NEW	NEW			NEW	NEW
		-M50 CTCP135-P	-TMQ CTCP115-P	-TMQ CTCP125-P	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115-P	-M70 CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	M
		CNMG	CNMG	CNMG	CNMG	CNMG	CNMG	CNMG
		76 135 ...	76 196 ...	76 196 ...	70 119 ...	70 119 ...	76 119 ...	76 119 ...
ANSI	RE inch							
431EN	0.0157	72801						
432EN	0.0315	73001	33001	53001	030	530	33001	53001
433EN	0.0472	73201	32001	53201	032	532	32001	53201
434EN	0.0630	73401			034	534	33401	53401
542EN	0.0315	74201			042	542	34201	54201
543EN	0.0472	74401			044	544	34401	54401
544EN	0.0630	74601			046	546	34601	54601
546EN	0.0945						34801	54801
642EN	0.0315						35401	55401
643EN	0.0472				056	556	35601	55601
644EN	0.0630				058	558	35801	55801
646EN	0.0945						36001	56001
P		●	●	●	○	○	●	●
M		○						
K			○	○	●	●	○	○
N								
S								
H								
O								

9

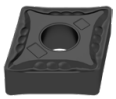
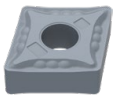
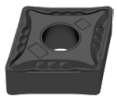
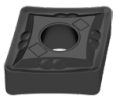
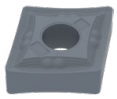
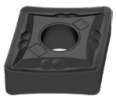
CNMG / CNMA / CNMM

		NEW			NEW	NEW	NEW	NEW
		-M70 CTCP135-P	CTCK110	CTCK120	-R28 CTCP115-P	-R28 CTCP125-P	-R28 CTCP135-P	-R58 CTCP115-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	R	R	R	R	R	R
		CNMG	CNMA	CNMA	CNMM	CNMM	CNMM	CNMM
		76 119 ...	70 100 ...	70 100 ...	76 114 ...	76 114 ...	76 114 ...	76 115 ...
ANSI	RE inch							
431EN	0.0157		028	528				
432EN	0.0315	73001	030	530	33001	53001		33001
433EN	0.0472	73201	032	532	33201	53201	73201	33201
434EN	0.0630	73401	034	534	33401	53401	73401	33401
542EN	0.0315	74201	042	542				
543EN	0.0472	74401	044	544	34401	54401	74401	34401
544EN	0.0630	74601	046	546	34601	54601	74601	34601
546EN	0.0945	74801						34801
642EN	0.0315	75401						
643EN	0.0472	75601	056	556	35601	55601	75601	35601
644EN	0.0630	75801	058	558	35801	55801	75801	35801
646EN	0.0945	76001			36001	56001	76001	36001
866EN	0.0945				38401	58401	78401	38401
P		●	○	○	●	●	●	●
M		○					○	
K			●	●	○	○		○
N								
S								
H								
O								

CNMM

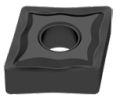
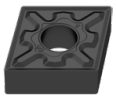
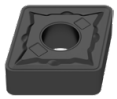
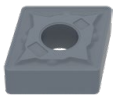
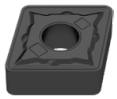
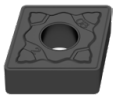
		NEW	NEW	NEW	NEW	NEW
		-R58 CTCP125-P	-R58 CTCP135-P	-R88 CTCP115-P	-R88 CTCP125-P	-R88 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		R	R	R	R	R
		CNMM	CNMM	CNMM	CNMM	CNMM
		76 115 ...	76 115 ...	76 133 ...	76 133 ...	76 133 ...
ANSI	RE inch					
432EN	0.0315	53001	73001			
433EN	0.0472	53201	73201			
434EN	0.0630	53401	73401			
543EN	0.0472	54401	74401			
544EN	0.0630	54601	74601			
546EN	0.0945	54801	74801			
546SN	0.0945			34801	54801	74801
643EN	0.0472	55601	75601			
644EN	0.0630	55801	75801			
644SN	0.0630			35801	55801	75801
646EN	0.0945	52401	76001			
646SN	0.0945			36001	56001	76001
866EN	0.0945	58401	78401			
866SN	0.0945			38401	58401	78401
P		●	●	●	●	●
M			○			○
K		○		○	○	
N						
S						
H						
O						

CNMG

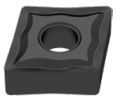
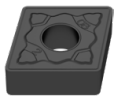
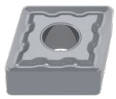
		-F30 CTCM120	-F30 CTPM125	-F30 CTCM130	-M30 CTCM120	-M30 CTPM125	-M30 CTCM130
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		F	F	F	M	M	M
		CNMG	CNMG	CNMG	CNMG	CNMG	CNMG
		75 010 ...	75 010 ...	75 010 ...	75 011 ...	75 011 ...	75 011 ...
ANSI	RE inch						
431EN	0.0157	12800	280	32800			
432EN	0.0315	13000	230	33000	13000	230	33000
433EN	0.0472				13200	232	33200
434EN	0.0630				13400	234	33400
P		○	○	○	○	○	○
M		●	●	●	●	●	●
K							
N							
S				○			○
H							
O							

9

CNMG

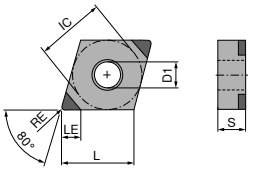
		NEW	NEW				NEW
		-42 CTCM130	-M42 CTCM130	-M60 CTCM120	-M60 CTPM125	-M60 CTCM130	-M70 CTCM130
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		M	M	M	M	M	M
		CNMG	CNMG	CNMG	CNMG	CNMG	CNMG
		75 030 ...	75 029 ...	75 012 ...	75 012 ...	75 012 ...	75 037 ...
ANSI	RE inch						
431EN	0.0157		32800				
432EN	0.0315	33000	33000	13000	230	33000	33000
433EN	0.0472		33200	13200	232	33200	33200
434EN	0.0630			13400	234	33400	
543EN	0.0472			14400	24400	34400	34400
643EN	0.0472						35600
644EN	0.0630						35800
P		○	○	○	○	○	○
M		●	●	●	●	●	●
K							
N							
S		○	○			○	○
H							
O							

CNMG

		NEW	NEW	NEW		NEW
		-42 CTCM130	-M70 CTCM130	-F34 CTPX710	-M34 CTPX710	-M42 CTPX710
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		M	M	F	M	M
		CNMG	CNMG	CNMG	CNMG	CNMG
		75 030 ...	75 037 ...	75 299 ...	75 003 ...	75 007 ...
ANSI	RE inch					
431EN	0.0157			62800	62800	
432EN	0.0315	33000	33000	63000	63000	63000
433EN	0.0472		33200	63200	63200	63200
434EN	0.0630				63400	
543EN	0.0472		34400			
643EN	0.0472		35600			
644EN	0.0630		35800			
P		○	○	●	●	●
M		●	●	●	●	●
K						
N				○	○	○
S		○	○	●	●	●
H						
O						

CNGA

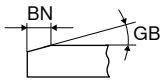
Designation	L inch	S inch	D1 inch	IC inch
CNGA 431E..	0.5079	0.1874	0.202	0.500
CNGA 431S..	0.5079	0.1874	0.202	0.500
CNGA 432E..	0.5079	0.1874	0.202	0.500
CNGA 432S..	0.5079	0.1874	0.202	0.500
CNGA 433E..	0.5079	0.1874	0.202	0.500
CNGA 433S..	0.5079	0.1874	0.202	0.500



CNGA B

CNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners

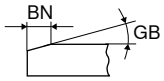


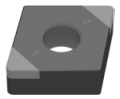
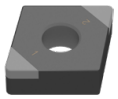
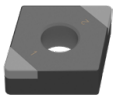
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch	NEW CTBH1000C	NEW CTBH2000C	NEW CTBH3000C
						F	F	F
						PCBN CNGA	PCBN CNGA	PCBN CNGA
						71 003 ...	71 003 ...	71 003 ...
431EN	0.0157			**B (2)**	0.1299	**70002**	**80002**	
431SN	0.0157	0.0055	20°	**B (2)**	0.1299			**90002**
432EN	0.0315			**B (2)**	0.1299	**70302**	**80302**	
432SN	0.0315	0.0055	20°	**B (2)**	0.1299			**90302**
433EN	0.0472			**B (2)**	0.1220	**70602**	**80602**	
433SN	0.0472	0.0055	20°	**B (2)**	0.1220			**90602**
P								
M								
K								
N								
S								
H						●	●	●
O								

9

CNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



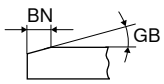
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN CNGA	PCBN CNGA	PCBN CNGA
	71 003 ...	71 003 ...	71 003 ...

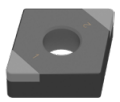
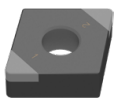
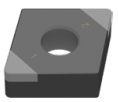
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
431SN	0.0157	0.0035	15°	B (2)	0.1299	70102	80102	
431SN	0.0157	0.0071	25°	B (2)	0.1299			90102
432SN	0.0315	0.0035	15°	B (2)	0.1299	70402	80402	
432SN	0.0315	0.0071	25°	B (2)	0.1299			90402
433SN	0.0472	0.0035	15°	B (2)	0.1220	70702	80702	
433SN	0.0472	0.0071	25°	B (2)	0.1220			90702

P			
M			
K			
N			
S			
H	●	●	●
O			

CNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



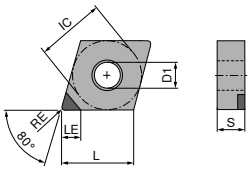
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN CNGA	PCBN CNGA	PCBN CNGA
	71 003 ...	71 003 ...	71 003 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
431SN	0.0157	0.0055	20°	B (2)	0.1299	70202	80202	
431SN	0.0157	0.0079	35°	B (2)	0.1299			90202
432SN	0.0315	0.0055	20°	B (2)	0.1299	70502	80502	
432SN	0.0315	0.0079	35°	B (2)	0.1299			90502
433SN	0.0472	0.0055	20°	B (2)	0.1220	70802	80802	
433SN	0.0472	0.0079	35°	B (2)	0.1220			90802

P			
M			
K			
N			
S			
H	●	●	●
O			

CNGA

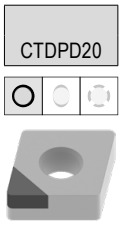
Designation	L inch	S inch	D1 inch	IC inch
CNGA 43..	0.5079	0.1874	0.202	0.500

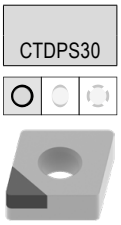


CNGA A

CNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners





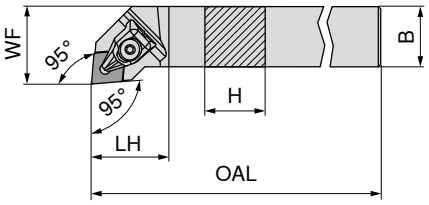
ANSI	RE inch	TCE (NOI)	LE inch	F DIAMOND CNGA 71 127 ...	F DIAMOND CNGA 71 127 ...
431FN	0.0157	**A (1)**	0.2480	**10001**	**20001**
432FN	0.0315	**A (1)**	0.2362	**10101**	**20101**
433FN	0.0472	**A (1)**	0.2244	**10201**	**20201**
P					
M					
K					
N				●	●
S					
H					
O				●	●

9

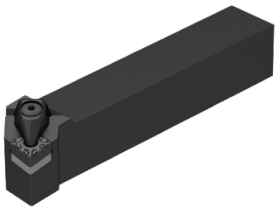
MaxiLock-D – DCLN 95° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



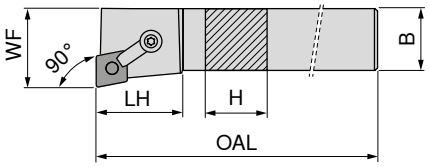
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 501 ...	Right-hand 78 500 ...
DCLN R/L 12-4BA-N	0.750	0.750	4.500	1.250	1.000	CN..43..	**01294**	**01294**
DCLN R/L 12-4B-N	0.750	0.750	4.500	1.250	1.000	CN..43..	**01293**	**01293**
DCLN R/L 16-4D-N	1.000	1.000	6.000	1.250	1.250	CN..43..	**01689**	**01689**
DCLN R/L 16-4DA-N	1.000	1.000	6.000	1.250	1.250	CN..43..	**01690**	**01690**
DCLN R/L 20-4D-N	1.250	1.250	6.000	1.250	1.500	CN..43..	**02089**	**02089**
DCLN R/L 20-4DA-N	1.250	1.250	6.000	1.250	1.500	CN..43..	**02090**	**02090**
DCLN R/L 20-5D-N	1.250	1.250	6.000	1.380	1.500	CN..54..	**02084**	**02084**
DCLN L 20-5DA-N	1.250	1.250	6.000	1.380	1.500	CN..54..	**02085**[1)]	**02085**[1)]
DCLN R/L 24-5E-N	1.500	1.500	7.000	1.380	2.000	CN..54..	**02482**[1)]	**02482**[1)]
DCLN R/L 24-5EA-N	1.500	1.500	7.000	1.380	2.000	CN..54..	**02483**[1)]	**02483**[1)]
DCLN L 20-6D-N	1.250	1.250	6.000	1.650	1.500	CN..64..	**02080**	**02080**
DCLN R/L 20-6DA-N	1.250	1.250	6.000	1.650	1.500	CN..64..	**02081**[1)]	**02081**[1)]
DCLN R/L 24-6E-N	1.500	1.500	7.000	1.650	2.000	CN..64..	**02477**[1)]	**02477**[1)]
DCLN R/L 24-6EA-N	1.500	1.500	7.000	1.650	2.000	CN..64..	**02478**[1)]	**02478**[1)]

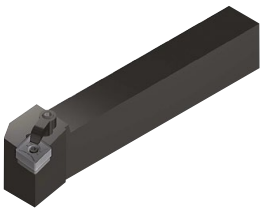
1) Not in stock

Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 500 01293 / 78 501 01293	**07600**	**08100**	**08300**		**08500**	**04900**
78 500 01689 / 78 501 01689	**07600**	**08100**	**08300**		**08500**	**04900**
78 500 01690 / 78 501 01690	**07600**	**08100**	**08300**		**08500**	**04900**
78 500 02089 / 78 501 02089	**07600**	**08100**	**08300**		**08500**	**04900**
78 500 02090 / 78 501 02090	**07600**	**08100**	**08300**		**08500**	**04900**
78 500 02084 / 78 501 02084	**07700**	**08100**	**08300**	**04100**	**08600**	**04900**
78 500 02085 / 78 501 02085	**07700**	**08100**	**08300**	**04100**	**08600**	**04900**
78 500 02482 / 78 501 02482	**07700**	**08100**	**08300**	**04100**	**08600**	**04900**
78 500 02483 / 78 501 02483	**07700**	**08100**	**08300**	**04100**	**08600**	**04900**
78 500 02080 / 78 501 02080	**07800**	**08100**	**08300**	**00900**	**08700**	**04900**
78 500 02081 / 78 501 02081	**07800**	**08100**	**08300**	**00900**	**08700**	**04900**
78 500 02477 / 78 501 02477	**07800**	**08100**	**08300**	**00900**	**08700**	**04900**
78 500 02478 / 78 501 02478	**07800**	**08100**	**08300**	**00900**	**08700**	**04900**

MaxiLock-M – MCFN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

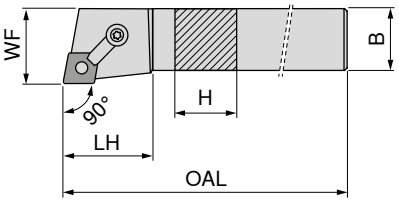
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 517 ...	Right-hand 78 516 ...
MCFN R/L 12-4B	0.750	0.750	4.500	1.120	1.000	CN..43..	**01224**[1)]	**01224**[1)]
MCFN R/L 16-4D	1.000	1.000	6.000	1.120	1.250	CN..43..	**01644**[1)]	**01644**[1)]
MCFN R/L 20-4D	1.250	1.250	6.000	1.120	1.500	CN..43..	**02044**[1)]	**02044**[1)]
MCFN R/L 85-4D	1.250	1.000	6.000	1.120	1.250	CN..43..	**08544**[1)]	**08544**[1)]
MCFN R/L 16-5D	1.000	1.000	6.000	1.250	1.250	CN..54..	**01645**[1)]	**01645**[1)]
MCFN R/L 20-5D	1.250	1.250	6.000	1.250	1.500	CN..54..	**02045**[1)]	**02045**[1)]
MCFN R/L 24-5D	1.500	1.500	6.000	1.250	2.000	CN..54..	**02445**[1)]	**02445**[1)]
MCFN R/L 16-6D	1.000	1.000	6.000	1.310	1.250	CN..64..	**01646**[1)]	**01646**[1)]
MCFN R/L 20-6D	1.250	1.250	6.000	1.310	1.500	CN..64..	**02046**[1)]	**02046**[1)]
MCFN R/L 24-6D	1.500	1.500	6.000	1.250	2.000	CN..64..	**02446**[1)]	**02446**[1)]

1) Not in stock

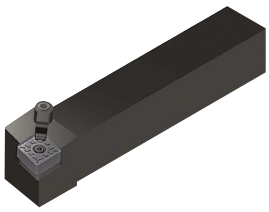
Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...
78 516 01224 / 78 517 01224	**00400**	**06900**	**03100**	**03800**	**00800**
78 516 01644 / 78 517 01644	**00400**	**06900**	**03100**	**03800**	**00800**
78 516 02044 / 78 517 02044	**00400**	**06900**	**03100**	**03800**	**00800**
78 516 08544 / 78 517 08544	**00400**	**06900**	**03100**	**03800**	**00800**
78 516 01645 / 78 517 01645	**00300**	**08100**	**03200**	**03900**	**04100**
78 516 02045 / 78 517 02045	**00300**	**08100**	**03200**	**03900**	**04100**
78 516 02445 / 78 517 02445	**00300**	**08100**	**03200**	**03900**	**04100**
78 516 01646 / 78 517 01646	**00300**	**08100**	**03300**	**03900**	**00900**
78 516 02046 / 78 517 02046	**00300**	**08100**	**03300**	**03900**	**00900**
78 516 02446 / 78 517 02446	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-M – MCGN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



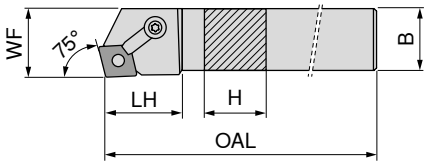
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 519 ...	Right-hand 78 518 ...
MCGN R/L 12-4B	0.750	0.750	4.500	1.120	1.000	CN..43..	**01224**[1)]	**01224**[1)]
MCGN R/L 16-4D	1.000	1.000	6.000	1.120	1.250	CN..43..	**01644**[1)]	**01644**[1)]
MCGN R/L 20-4D	1.250	1.250	6.000	1.120	1.500	CN..43..	**02044**[1)]	**02044**[1)]
MCGN R/L 24-4D	1.500	1.500	6.000	1.250	2.000	CN..43..	**02444**[1)]	**02444**[1)]
MCGN R/L 16-5D	1.000	1.000	6.000	1.500	1.250	CN..54..	**01645**[1)]	**01645**[1)]
MCGN R/L 20-5D	1.250	1.250	6.000	1.500	1.500	CN..54..	**02045**[1)]	**02045**[1)]
MCGN R/L 24-5D	1.500	1.500	6.000	1.500	2.000	CN..54..	**02445**[1)]	**02445**[1)]
MCGN R/L 20-6D	1.250	1.250	6.000	1.650	1.500	CN..64..	**02046**[1)]	**02046**[1)]
MCGN R/L 24-6D	1.500	1.500	6.000	1.650	2.000	CN..64..	**02446**[1)]	**02446**[1)]

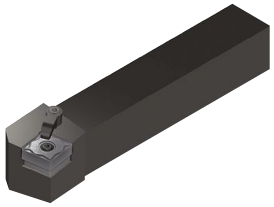
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...
78 518 01224 / 78 519 01224	**00400**	**06900**	**03100**	**03800**	**00800**
78 518 01644 / 78 519 01644	**00400**	**06900**	**03100**	**03800**	**00800**
78 518 02044 / 78 519 02044	**00400**	**06900**	**03100**	**03800**	**00800**
78 518 02444 / 78 519 02444	**00400**	**06900**	**03100**	**03800**	**00800**
78 518 01645 / 78 519 01645	**00300**	**08100**	**03200**	**03900**	**04100**
78 518 02045 / 78 519 02045	**00300**	**08100**	**03200**	**03900**	**04100**
78 518 02445 / 78 519 02445	**00300**	**08100**	**03200**	**03900**	**04100**
78 518 02046 / 78 519 02046	**00300**	**08100**	**03300**	**03900**	**00900**
78 518 02446 / 78 519 02446	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-M – MCKN 75° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

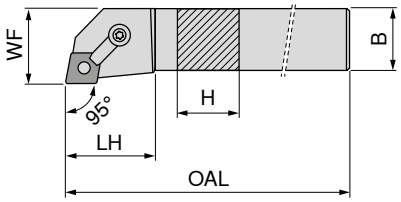
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 521 ...	Right-hand 78 520 ...
MCKN R/L 12-4B	0.750	0.750	4.500	1.200	1.000	CN..43..	**01224**[1)]	**01224**[1)]
MCKN R/L 16-4D	1.000	1.000	6.000	1.200	1.250	CN..43..	**01644**[1)]	**01644**[1)]
MCKN R/L 20-4D	1.250	1.250	6.000	1.200	1.500	CN..43..	**02044**[1)]	**02044**[1)]
MCKN R/L 16-5D	1.000	1.000	6.000	1.350	1.250	CN..54..	**01645**[1)]	**01645**[1)]
MCKN R/L 20-5D	1.250	1.250	6.000	1.350	1.500	CN..54..	**02045**[1)]	**02045**[1)]
MCKN R/L 16-6D	1.000	1.000	6.000	1.470	1.250	CN..64..	**01646**[1)]	**01646**[1)]
MCKN R/L 20-6D	1.250	1.250	6.000	1.470	1.500	CN..64..	**02046**[1)]	**02046**[1)]
MCKN R/L 24-6D	1.500	1.500	6.000	1.470	2.000	CN..64..	**02446**[1)]	**02446**[1)]

1) Not in stock

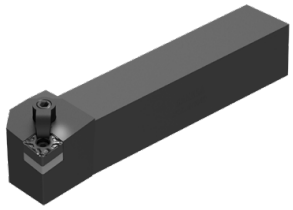
Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...
78 520 01224 / 78 521 01224	**00400**	**06900**	**03100**	**03800**	**00800**
78 520 01644 / 78 521 01644	**00400**	**06900**	**03100**	**03800**	**00800**
78 520 02044 / 78 521 02044	**00400**	**06900**	**03100**	**03800**	**00800**
78 520 01645 / 78 521 01645	**00300**	**08100**	**03200**	**03900**	**04100**
78 520 02045 / 78 521 02045	**00300**	**08100**	**03200**	**03900**	**04100**
78 520 01646 / 78 521 01646	**00300**	**08100**	**03300**	**03900**	**00900**
78 520 02046 / 78 521 02046	**00300**	**08100**	**03300**	**03900**	**00900**
78 520 02446 / 78 521 02446	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-M – MCLN 95° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



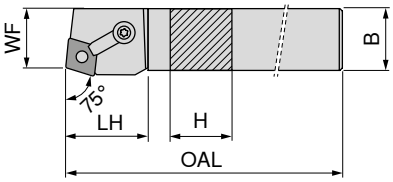
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 523 ...	Right-hand 78 522 ...
MCLN R/L 12-4B	0.750	0.750	4.500	1.130	1.000	CN..43..	**01224**[1)]	**01224**[1)]
MCLN R/L 16-4D	1.000	1.000	6.000	1.130	1.250	CN..43..	**01644**[1)]	**01644**[1)]
MCLN R/L 85-4D	1.250	1.000	6.000	1.130	1.250	CN..43..	**08544**[1)]	**08544**[1)]
MCLN R/L 20-4D	1.250	1.250	6.000	1.130	1.500	CN..43..	**02044**[1)]	**02044**[1)]
MCLN R/L 16-5D	1.000	1.000	6.000	1.470	1.250	CN..54..	**01645**[1)]	**01645**[1)]
MCLN R/L 20-5D	1.250	1.250	6.000	1.470	1.500	CN..54..	**02045**[1)]	**02045**[1)]
MCLN R/L 24-5D	1.500	1.500	6.000	1.470	2.000	CN..54..	**02445**[1)]	**02445**[1)]
MCLN R/L 16-6D	1.000	1.000	6.000	1.510	1.250	CN..64..	**01646**[1)]	**01646**[1)]
MCLN R/L 20-6D	1.250	1.250	6.000	1.510	1.500	CN..64..	**02046**[1)]	**02046**[1)]
MCLN R/L 85-6D	1.250	1.000	6.000	1.510	1.250	CN..64..	**08546**[1)]	**08546**[1)]
MCLN R/L 24-6D	1.500	1.500	6.000	1.510	2.000	CN..64..	**02446**[1)]	**02446**[1)]
MCLN R/L 24-6E	1.500	1.500	7.000	1.500	2.000	CN..64..	**02456**[1)]	**02456**[1)]
MCLN R/L 86-6E	1.500	1.000	7.000	1.510	1.250	CN..64..	**08656**[1)]	**08656**[1)]

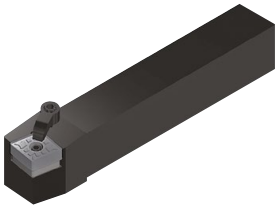
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...
78 522 01224 / 78 523 01224	**00400**	**06900**	**03100**	**03800**	**00800**
78 522 01644 / 78 523 01644	**00400**	**06900**	**03100**	**03800**	**00800**
78 522 08544 / 78 523 08544	**00400**	**06900**	**03100**	**03800**	**00800**
78 522 02044 / 78 523 02044	**00400**	**06900**	**03100**	**03800**	**00800**
78 522 01645 / 78 523 01645	**00300**	**08100**	**03200**	**03900**	**04100**
78 522 02045 / 78 523 02045	**00300**	**08100**	**03200**	**03900**	**04100**
78 522 02445 / 78 523 02445	**00300**	**08100**	**03200**	**03900**	**04100**
78 522 01646 / 78 523 01646	**00300**	**08100**	**03300**	**03900**	**00900**
78 522 02046 / 78 523 02046	**00300**	**08100**	**03300**	**03900**	**00900**
78 522 08546 / 78 523 08546	**00300**	**08100**	**03300**	**03900**	**00900**
78 522 02446 / 78 523 02446	**00300**	**08100**	**03300**	**03900**	**00900**
78 522 02456 / 78 523 02456	**00300**	**08100**	**03300**	**03900**	**00900**
78 522 08656 / 78 523 08656	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-M – MCRN 75° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

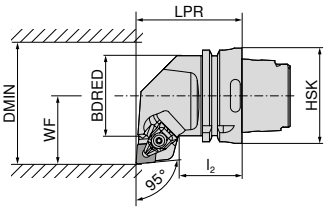
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 525 ...	Right-hand 78 524 ...
MCRN R/L 12-4B	0.750	0.750	4.500	1.180	0.878	CN..43..	**01224**[1)]	**01224**[1)]
MCRN R/L 16-4D	1.000	1.000	6.000	1.180	1.128	CN..43..	**01644**[1)]	**01644**[1)]
MCRN R/L 20-4D	1.250	1.250	6.000	1.180	1.318	CN..43..	**02044**[1)]	**02044**[1)]
MCRN R/L 16-5D	1.000	1.000	6.000	1.100	1.101	CN..54..	**01645**[1)]	**01645**[1)]
MCRN R/L 20-5D	1.250	1.250	6.000	1.350	1.351	CN..54..	**02045**[1)]	**02045**[1)]
MCRN R/L 20-6D	1.250	1.250	6.000	1.318	1.318	CN..64..	**02046**[1)]	**02046**[1)]
MCRN R/L 24-6D	1.500	1.500	6.000	1.818	1.818	CN..64..	**02446**[1)]	**02446**[1)]

1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...
78 524 01224 / 78 525 01224	**00400**	**06900**	**03100**	**03800**	**00800**
78 524 01644 / 78 525 01644	**00400**	**06900**	**03100**	**03800**	**00800**
78 524 02044 / 78 525 02044	**00400**	**06900**	**03100**	**03800**	**00800**
78 524 01645 / 78 525 01645	**00300**	**08100**	**03200**	**03900**	**04100**
78 524 02045 / 78 525 02045	**00300**	**08100**	**03200**	**03900**	**04100**
78 524 02046 / 78 525 02046	**00300**	**08100**	**03300**	**03900**	**00900**
78 524 02446 / 78 525 02446	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-D – DCLN 95° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key

Illustrations show right-hand versions

Designation	Adapter	LPR	l_2	BDRED	WF	DMIN	torque moment	Insert	Left-hand	Right-hand
		mm	mm	mm	mm	mm	Nm		74 504 ...	74 503 ...
HSK T63 DCLN R/L 12	HSK-T 63	70	42	53	45	100	4	CN.. 1204	**512**	**512**
HSK T63 DCLN R/L 16	HSK-T 63	70	42	53	45	125	4	CN.. 1606	**516**	**516**
HSK T63 DCLN R/L 19	HSK-T 63	70	42	53	45	125	8	CN.. 1906	**519**	**519**
HSK T100 DCLN R/L 12	HSK-T 100	80	45	88	55	125	4	CN.. 1204	**712**	**712**
HSK T100 DCLN R/L 19	HSK-T 100	80	45	88	55	125	8	CN.. 1906	**719**	**719**


XPress type
70 950 ...


Screwdriver
80 950 ...

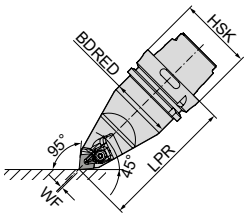

Clamping screw
70 950 ...


Carbide type C
70 950 ...

Spare parts						
74 504 516 / 74 503 516	**825**	T20 - IP	**129**	M5x14 - IP	**821**	**814**
74 504 512 / 74 503 712	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**810**
74 504 519 / 74 503 719	**826**	T20 - IP	**129**	M5x14 - IP	**821**	**816**

MaxiLock-D – DCMN 95° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key

Neutral
74 506 ...

Designation	Adapter	LPR	BDRED	WF	torque moment	Insert	
		mm	mm	mm	Nm		
HSK T63 DCMN N 12	HSK-T 63	115	53	0	4	CN.. 1204	**512**
HSK T100 DCMN N 12	HSK-T 100	150	88	0	4	CN.. 1204	**712**


XPress type
70 950 ...


Screwdriver
80 950 ...

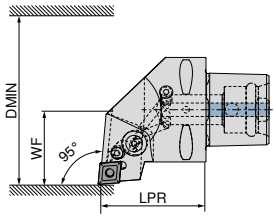

Clamping screw
70 950 ...


Carbide type C
70 950 ...

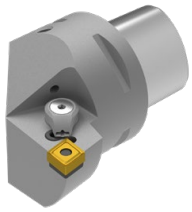
Spare parts						
74 506 512 / 74 506 712	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**810**

MaxiLock-N – PCLN 95° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions



Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 657 ...	Right-hand 84 656 ...
PSC40 PCLN R/L 50050-12	PSC 40	50	27	50	5	CN.. 1204	DC	**01295**	**01295**
PSC50 PCLN R/L 65060-12	PSC 50	60	35	65	5	CN.. 1204	DC	**01294**	**01294**
PSC63 PCLN R/L 80065-12	PSC 63	65	45	80	5	CN.. 1204	DC	**01293**	**01293**

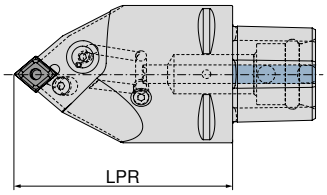
The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Spare parts

	Shim 84 950 ...		Elbow lever screw 84 950 ...	Lever 84 950 ...	Carbide type C 84 950 ...
84 656 01293 / 84 657 01295	**29200**	M8X1/L17 SW3	**28700**	**29000**	**27800**

MaxiLock-N – PCMN 50° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	Neutral 84 675 ...
PSC63 PCMN N 0100-12	PSC 63	100	5	CN.. 1204	DC	**01293**
PSC63 PCMN N 0130-12	PSC 63	130	5	CN.. 1204	DC	**11293**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

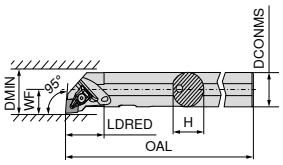
Spare parts

	Shim 84 950 ...		Elbow lever screw 84 950 ...	Lever 84 950 ...	Carbide type C 84 950 ...
84 675 01293 / 84 675 11293	**29200**	M8X1/L17 SW3	**28700**	**29000**	**27800**

MaxiLock-D – DCLN 95° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 701 ...	Right-hand 78 700 ...
S16T DCLN R/L 4N	1.000	0.900	12.000	1.575	0.640	1.280	CN..43..	**41626**[1)]	**41626**[1)]
S20U DCLN R/L 4N	1.250	1.180	14.000	1.771	0.765	1.530	CN..43..	**42030**[1)]	**42030**[1)]
S24U DCLN R/L 4N	1.500	1.370	14.000	1.968	0.890	1.780	CN..43..	**42434**[1)]	**42434**[1)]

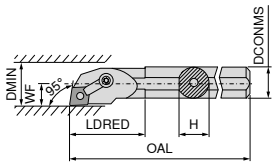
1) Not in stock

Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Carbide type C 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 700 41626 / 78 701 41626	**07600**	**08100**	**08300**	**07200**	**08500**	**04900**
78 700 42030 / 78 701 42030	**07600**	**08100**	**08300**	**07200**	**08500**	**04900**
78 700 42434 / 78 701 42434	**07600**	**08100**	**08300**	**07200**	**08500**	**04900**

MaxiLock-M – MCLN 95° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 705 ...	Right-hand 78 704 ...
A16T MCLN R/L 4	1.000	0.900	12.000	2.500	0.640	1.280	CN..32..	**41616**	**41616**
S16T MCLN R/L 4	1.000	0.900	12.000	2.500	0.640	1.280	CN..43..	**41626**[1)]	**41626**[1)]
S20U MCLN R/L 4	1.250	1.118	14.000	3.000	0.765	1.530	CN..43..	**42030**[1)]	**42030**[1)]
A20U MCLN R/L 4	1.250	1.118	14.000	3.000	0.765	1.530	CN..43..	**42020**[1)]	**42020**[1)]
S24U MCLN R/L 4	1.500	1.370	14.000	3.000	0.890	1.780	CN..43..	**42434**[1)]	**42434**[1)]
A24U MCLN R/L 4	1.500	1.370	14.000	3.000	0.890	1.780	CN..43..	**42424**	**42424**
S28U MCLN R/L 4	1.750	1.630	14.000	4.000	1.015	2.030	CN..43..	**42838**[1)]	**42838**[1)]
A28U MCLN R/L 4	1.750	1.630	14.000	4.000	1.015	2.030	CN..43..	**42828**[1)]	**42828**[1)]
S32V MCLN R/L 4	2.000	1.870	16.000	4.000	1.281	2.562	CN..43..	**43242**[1)]	**43242**[1)]
S40V MCLN R/L 4	2.500	2.380	16.000	4.000	1.531	3.062	CN..43..	**44050**[1)]	**44050**[1)]
S32V MCLN R/L 5	2.000	1.870	16.000	4.000	1.281	2.562	CN..54..	**53242**[1)]	**53242**[1)]
A32V MCLN R/L 5	2.000	1.870	16.000	4.000	1.281	2.562	CN..54..	**53233**[1)]	**53233**[1)]
S40V MCLN R/L 5	2.500	2.380	16.000	4.000	1.531	3.062	CN..54..	**54050**[1)]	**54050**[1)]
A32V MCLN R/L 6	2.000	1.870	16.000	4.000	1.281	2.562	CN..64..	**63233**[1)]	**63233**[1)]
S32V MCLN R/L 6	2.000	1.870	16.000	4.000	1.281	2.562	CN..64..	**63242**[1)]	**63242**[1)]
S40V MCLN R/L 6	2.500	2.380	16.000	4.000	1.531	3.062	CN..64..	**64050**[1)]	**64050**[1)]

1) Not in stock


Clamp


Key I


Dowel pin

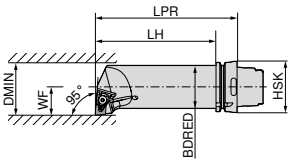

Clamping screw


Carbide type C

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 704 41616 / 78 705 41616	**00400**	**06900**	**03000**	**03700**	
78 704 41626 / 78 705 41626	**00400**	**06900**	**03000**	**03700**	
78 704 42030 / 78 705 42030	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 42020 / 78 705 42020	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 42434 / 78 705 42434	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 42424 / 78 705 42424	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 42838 / 78 705 42838	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 42828 / 78 705 42828	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 43242 / 78 705 43242	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 44050 / 78 705 44050	**00400**	**06900**	**03100**	**03800**	**00800**
78 704 53242 / 78 705 53242	**00300**	**08100**	**03200**	**03900**	**04100**
78 704 53233 / 78 705 53233	**00300**	**08100**	**03200**	**03900**	**04100**
78 704 54050 / 78 705 54050	**00300**	**08100**	**03200**	**03900**	**04100**
78 704 63233 / 78 705 63233	**00300**	**08100**	**03300**	**03900**	**00900**
78 704 63242 / 78 705 63242	**00300**	**08100**	**03300**	**03900**	**00900**
78 704 64050 / 78 705 64050	**00300**	**08100**	**03300**	**03900**	**00900**

MaxiLock-D – DCLN 95° – Boring bar with top clamping

Scope of supply:
Boring bar with Torx key



Illustrations show right-hand versions

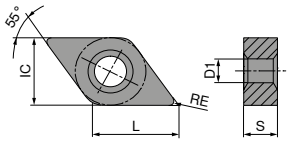
Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 529 ...		Right-hand 74 528 ...	
HSK T63 50Q DCLN R/L 12	HSK-T 63	175	149	50	35	63	4	CN.. 1204		**512**		**512**

Spare parts

 XPress type	**70 950 ...**	Screwdriver	**80 950 ...**	 Clamping screw	**70 950 ...**	 Carbide type C	**70 950 ...**
74 528 512 / 74 529 512	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**		**810**

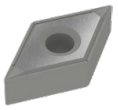
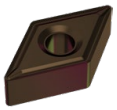
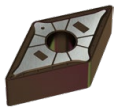
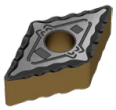
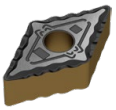
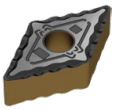
DNMG / DNMA / DNMM

Designation	L	S	D1	IC
	inch	inch	inch	inch
DNMG 33..	0.4567	0.1874	0.1500	0.3748
DNM. 43..	0.6102	0.1874	0.2032	0.5000
DNM. 44..	0.6102	0.250	0.2032	0.5000



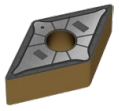
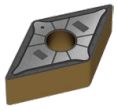
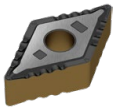
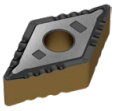
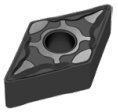
DNMG

NEW

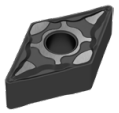
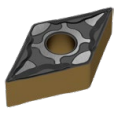
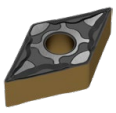
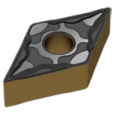
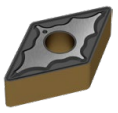
	-CF TCM10	-CF20 CTEP110	-TFQ CTEP110	-F50 CTCP115-P	-F50 CTCP125-P	-F50 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
	F	F	F	F	F	F
	CERMET	CERMET	CERMET			
	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG
	70 155 ...	76 102 ...	76 153 ...	76 134 ...	76 134 ...	76 134 ...
ANSI / RE inch						
33.5EN / 0.0079				30201	50201	70201
331EN / 0.0157	904	004		30401	50401	70401
332EN / 0.0315		006		30601	50601	70601
333EN / 0.0472				30801	50801	70801
431EN / 0.0157				31601	51601	71601
432EN / 0.0315				31801	51801	71801
433EN / 0.0472				32001	52001	72001
441EN / 0.0157	914	028	028	32801	52801	72801
442EN / 0.0315		030	030	33001	53001	73001
443EN / 0.0472		032		33201	53201	73201
P	●	●	●	●	●	●
M	○	○	○			○
K	○	○	○	○	○	
N						
S						
H						
O						

9

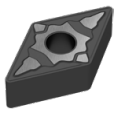
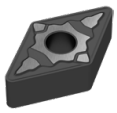
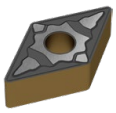
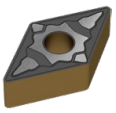
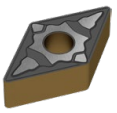
DNMG

		NEW	NEW	NEW	NEW	
		-TFQ CTCP115-P	-TFQ CTCP125-P	-XU CTCP115-P	-XU CTCP125-P	-M50 CTCK110
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		F	F	M	M	M
		DNMG	DNMG	DNMG	DNMG	DNMG
		76 153 ...	76 153 ...	76 291 ...	76 291 ...	70 133 ...
ANSI	RE inch					
432EN	0.0315					018
433EN	0.0472					020
441EN	0.0157	32801	52801	32801	52801	
442EN	0.0315	33001	53001	33001	53001	030
443EN	0.0472			33201	53201	032
P		●	●	●	●	○
M						
K		○	○	○	○	●
N						
S						
H						
O						

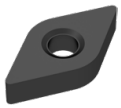
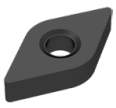
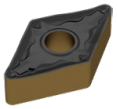
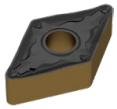
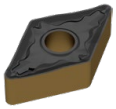
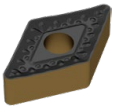
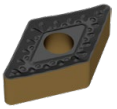
DNMG

			NEW	NEW	NEW	NEW
		-M50 CTCK120	-M50 CTCP115-P	-M50 CTCP125-P	-M50 CTCP135-P	-TMQ CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		M	M	M	M	M
		DNMG	DNMG	DNMG	DNMG	DNMG
		70 133 ...	76 136 ...	76 136 ...	76 136 ...	76 197 ...
ANSI	RE inch					
331EN	0.0157		30401	50401	70401	
332EN	0.0315		30601	50601	70601	
333EN	0.0472		30801	50801	70801	
431EN	0.0157		31601	51401	71601	
432EN	0.0315	518	31801	51801	71801	
433EN	0.0472	520	32001	51601	72001	
434EN	0.0630		32201	52201	72201	
441EN	0.0157		32801	52801	72801	
442EN	0.0315	530	33001	53001	73001	53001
443EN	0.0472	532	33201	53201	73201	53201
444EN	0.0630		33401	53401	73401	
P		○	●	●	●	●
M					○	
K		●	○	○		○
N						
S						
H						
O						

DNMG

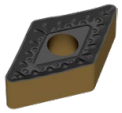
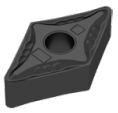
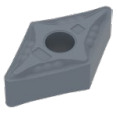
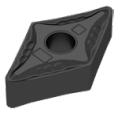
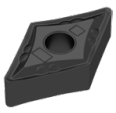
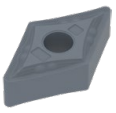
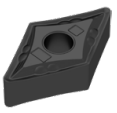
		-M70 CTCK110	-M70 CTCK120	-M70 CTCP115-P	-M70 CTCP125-P	-M70 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		M	M	M	M	M
		DNMG	DNMG	DNMG	DNMG	DNMG
		70 263 ...	70 263 ...	76 263 ...	76 263 ...	76 263 ...
ANSI	RE inch					
332EN	0.0315			30601	50601	70601
333EN	0.0472			30801	50801	70801
432EN	0.0315	018	518	31801	51801	71801
433EN	0.0472	020	520	32001	52001	72001
434EN	0.0630			32201	52201	72201
442EN	0.0315	030	530	33001	53001	73001
443EN	0.0472	032	532	33201	53201	73201
444EN	0.0630	034	534	33401	53401	73401
P		○	○	●	●	●
M						○
K		●	●	○	○	
N						
S						
H						
O						

DNMA / DNMM

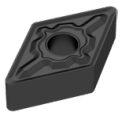
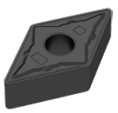
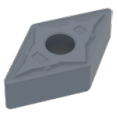
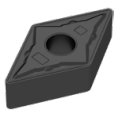
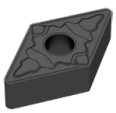
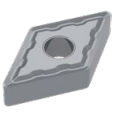
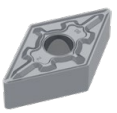
		CTCK110	CTCK120	-R28 CTCP115-P	-R28 CTCP125-P	-R28 CTCP135-P	-R58 CTCP115-P	-R58 CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		R	R	R	R	R	R	R
		DNMA	DNMA	DNMM	DNMM	DNMM	DNMM	DNMM
		70 156 ...	70 156 ...	76 165 ...	76 165 ...	76 165 ...	76 166 ...	76 166 ...
ANSI	RE inch							
432EN	0.0315	018	518					
433EN	0.0472	020	520					
442EN	0.0315	030	530					
443EN	0.0472	032	532	33201	53201	73201	33201	53201
444EN	0.0630			33401	53401	73401	33401	53401
P		○	○	●	●	●	●	●
M						○		
K		●	●	○	○		○	○
N								
S								
H								
O								

9

DNMM / DNMG

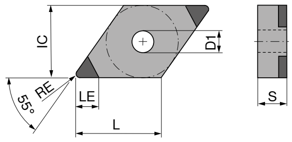
	-R58 CTCP135-P	-F30 CTCM120	-F30 CTPM125	-F30 CTCM130	-M30 CTCM120	-M30 CTPM125	-M30 CTCM130
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	R	F	F	F	M	M	M
	DNMM	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG
	76 166 ...	75 013 ...	75 013 ...	75 013 ...	75 014 ...	75 014 ...	75 014 ...
ANSI / RE inch							
331EN 0.0157		10400	204	30400			
332EN 0.0315		10600	206	30600	10600	206	30600
333EN 0.0472					10800	208	30800
431EN 0.0157		11600		31600			
432EN 0.0315		11800		31800	11800		31800
433EN 0.0472					12000		32000
441EN 0.0157		12800	228	32800			
442EN 0.0315		13000	230	33000	13000	230	33000
443EN 0.0472	73201				13200	232	33200
444EN 0.0630	73401						
P	●	○	○	○	○	○	○
M	○	●	●	●	●	●	●
K							
N							
S				○			○
H							
O							

DNMG

	-M42 CTCM130	-M60 CTCM120	-M60 CTPM125	NEW -M60 CTCM130	NEW -M70 CTCM130	-M34 CTPX710	NEW -M42 CTPX710
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M	M	M	M	M	M	M
	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG
	75 027 ...	75 015 ...	75 015 ...	75 015 ...	75 038 ...	75 004 ...	75 027 ...
ANSI / RE inch							
331EN 0.0157	30400						
332EN 0.0315	30600				30600		
431EN 0.0157	31600					61600	
432EN 0.0315	31800	11800		31800		61800	
433EN 0.0472		12000		32000		62000	
441EN 0.0157	32800						
442EN 0.0315	33000	13000	230	33000		63000	63000
443EN 0.0472		13200	232	33200		63200	
P	○	○	○	○	○	●	●
M	●	●	●	●	●	●	●
K							
N						○	○
S	○			○	○	●	●
H							
O							

DNGA

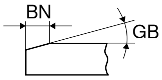
Designation	L inch	S inch	D1 inch	IC inch
DNGA 441E..	0.6102	0.250	0.2032	0.500
DNGA 441S..	0.6102	0.250	0.2032	0.500
DNGA 442E..	0.6102	0.250	0.2032	0.500
DNGA 442S..	0.6102	0.250	0.2032	0.500
DNGA 443E..	0.6102	0.250	0.2032	0.500
DNGA 443S..	0.6102	0.250	0.2032	0.500

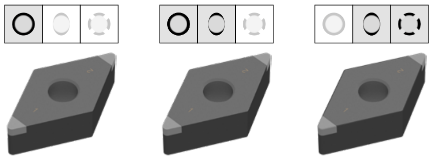


DNGA B

DNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners





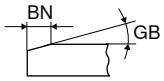
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch	NEW CTBH1000C F PCBN DNGA 71 017 ...	NEW CTBH2000C F PCBN DNGA 71 017 ...	NEW CTBH3000C F PCBN DNGA 71 017 ...
441EN	0.0157			**B (2)**	0.1417	**70002**	**80002**	
441SN	0.0157	0.0055	20°	**B (2)**	0.1417			**90002**
442EN	0.0315			**B (2)**	0.1299	**70302**	**80302**	
442SN	0.0315	0.0055	20°	**B (2)**	0.1299			**90302**
443EN	0.0472			**B (2)**	0.1181	**70602**	**80602**	
443SN	0.0472	0.0055	20°	**B (2)**	0.1181			**90602**

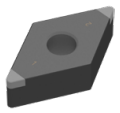
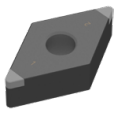
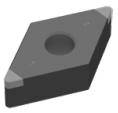
	CTBH1000C	CTBH2000C	CTBH3000C
P			
M			
K			
N			
S			
H	●	●	●
O			

→ v_c Page 196–199

DNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



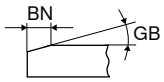
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN DNGA	PCBN DNGA	PCBN DNGA
	71 017 ...	71 017 ...	71 017 ...

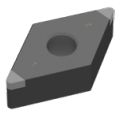
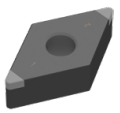
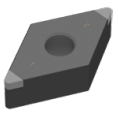
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
441SN	0.0157	0.0035	15°	B (2)	0.1417	70102	80102	
441SN	0.0157	0.0071	25°	B (2)	0.1417			90102
442SN	0.0315	0.0035	15°	B (2)	0.1299	70402	80402	
442SN	0.0315	0.0071	25°	B (2)	0.1299			90402
443SN	0.0472	0.0035	15°	B (2)	0.1181	70702	80702	
443SN	0.0472	0.0071	25°	B (2)	0.1181			90702

P			
M			
K			
N			
S			
H	●	●	●
O			

DNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



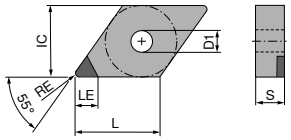
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN DNGA	PCBN DNGA	PCBN DNGA
	71 017 ...	71 017 ...	71 017 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
441SN	0.0157	0.0055	20°	B (2)	0.1417	70202	80202	
441SN	0.0157	0.0079	35°	B (2)	0.1417			90202
442SN	0.0315	0.0055	20°	B (2)	0.1299	70502	80502	
442SN	0.0315	0.0079	35°	B (2)	0.1299			90502
443SN	0.0472	0.0055	20°	B (2)	0.1181	70802	80802	
443SN	0.0472	0.0079	35°	B (2)	0.1181			90802

P			
M			
K			
N			
S			
H	●	●	●
O			

DNGA

Designation	L inch	S inch	D1 inch	IC inch
DNGA 43..	0.6102	0.1874	0.2032	0.500
DNGA 44..	0.6102	0.250	0.2032	0.500

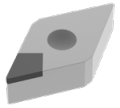


DNGA A

DNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners

CTDPD20



F
DIAMOND
DNGA
71 128 ...

ANSI	RE inch	TCE (NOI)	LE inch	
441FN	0.0157	**A (1)**	0.2520	**10301**
431FN	0.0157	**A (1)**	0.2520	**10001**
432FN	0.0315	**A (1)**	0.2362	**10101**
433FN	0.0472	**A (1)**	0.2205	**10201**
442FN	0.0315	**A (1)**	0.2362	**10401**
443FN	0.0472	**A (1)**	0.2205	**10501**

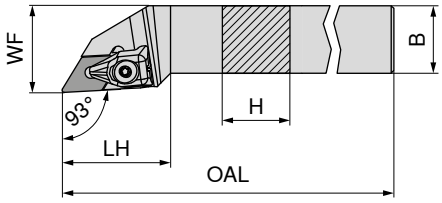
P	
M	
K	
N	●
S	
H	
O	●

9

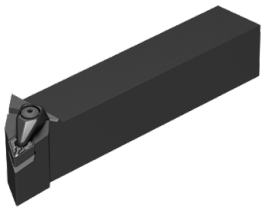
MaxiLock-D – DDJN 93° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



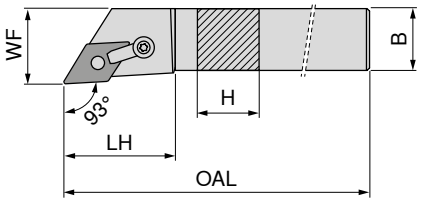
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 503 ...	Right-hand 78 502 ...
DDJN R/L 12-4BA-N	0.750	0.750	4.500	1.535	1.000	DN..43..	**01294**	**01294**
DDJN R/L 12-4B-N	0.750	0.750	4.500	1.535	1.000	DN..43..	**01293**	**01293**
DDJN R/L 16-4D-N	1.000	1.000	6.000	1.535	1.250	DN..43..	**01689**	**01689**
DDJN R/L 16-4DA-N	1.000	1.000	6.000	1.535	1.250	DN..43..	**01692**	**01692**
DDJN R/L 20-4D-N	1.250	1.250	6.000	1.535	1.500	DN..43..	**02089**	**02089**
DDJN R/L 20-4DA-N	1.250	1.250	6.000	1.535	1.500	DN..43..	**02092**	**02092**
DDJN R/L 24-4E-N	1.500	1.500	7.000	1.535	2.000	DN..43..	**02486**[1)]	**02486**[1)]
DDJN R/L 24-4EA-N	1.500	1.500	7.000	1.535	2.000	DN..43..	**02488**[1)]	**02488**[1)]

1) Not in stock

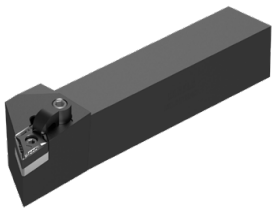
Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat D 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 502 01293 / 78 503 01293	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 01689 / 78 503 01689	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 01692 / 78 503 01692	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 02089 / 78 503 02089	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 02092 / 78 503 02092	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 02486 / 78 503 02486	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**
78 502 02488 / 78 503 02488	**07600**	**08100**	**08300**	**06700**	**08500**	**04900**

MaxiLock-M – MDJN 93° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 527 ...	Right-hand 78 526 ...
MDJN R/L 08-3A	0.500	0.500	4.000	1.060	0.625	DN..33..	**00813**[1)]	**00813**[1)]
MDJN R/L 10-3B	0.625	0.625	4.500	1.250	0.875	DN..33..	**01023**[1)]	**01023**[1)]
MDJN R/L 12-4B	0.750	0.750	4.500	1.500	1.000	DN..43..	**01224**[1)]	**01224**[1)]
MDJN R/L 16-4D	1.000	1.000	6.000	1.500	1.250	DN..43..	**01644**[1)]	**01644**[1)]
MDJN R/L 20-4D	1.250	1.250	6.000	1.500	1.500	DN..43..	**02044**[1)]	**02044**[1)]
MDJN R/L 85-4D	1.250	1.000	6.000	1.500	1.250	DN..43..	**08544**[1)]	**08544**[1)]
MDJN R/L 24-4D	1.500	1.500	6.000	1.500	2.000	DN..43..	**02444**[1)]	**02444**[1)]

1) Not in stock


Clamp


Key I


Dowel pin

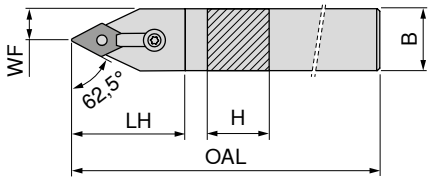

Clamping screw

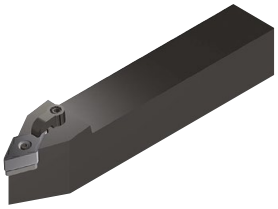

Solid Carbide Seat D

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 526 00813 / 78 527 00813	**00700**	**06800**		**03600**	
78 526 01023 / 78 527 01023	**00700**	**06800**		**03600**	
78 526 01224 / 78 527 01224	**00400**	**06900**	**03100**	**03800**	**04200**
78 526 01644 / 78 527 01644	**00400**	**06900**	**03100**	**03800**	**04200**
78 526 02044 / 78 527 02044	**00400**	**06900**	**03100**	**03800**	**04200**
78 526 08544 / 78 527 08544	**00400**	**06900**	**03100**	**03800**	**04200**
78 526 02444 / 78 527 02444	**00400**	**06900**	**03100**	**03800**	**04200**

MaxiLock-M – MDPN 62.5° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





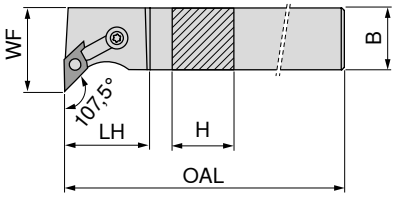
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 576 ...
MDPN N 12-4B	0.750	0.750	4.500	1.620	0.375	DN..43..	**01224**[1)]
MDPN N 16-4D	1.000	1.000	6.000	1.620	0.500	DN..43..	**01644**[1)]
MDPN N 20-4D	1.250	1.250	6.000	1.620	0.625	DN..43..	**02044**[1)]

1) Not in stock

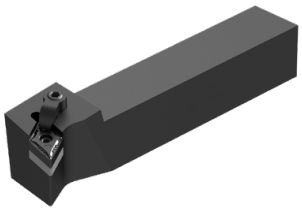
Spare parts for Article no.	Clamp 78 950 ...	Key I 78 950 ...	Dowel pin 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat D 78 950 ...
78 576 01224	**09000**	**06900**	**03100**	**03800**	**04200**
78 576 01644	**09000**	**06900**	**03100**	**03800**	**04200**
78 576 02044	**09000**	**06900**	**03100**	**03800**	**04200**

MaxiLock-M – MDQN 107.5° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



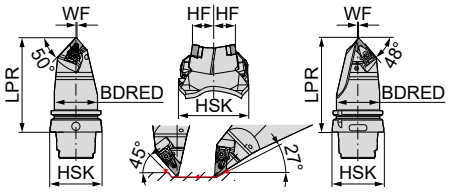
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 529 ...	Right-hand 78 528 ...
MDQN R/L 12-4B	0.750	0.750	4.500	1.370	1.000	DN..43..	**01293**[1)]	**01293**[1)]
MDQN R/L 16-4D	1.000	1.000	6.000	1.370	1.250	DN..43..	**01689**[1)]	**01689**[1)]
MDQN R/L 20-4D	1.250	1.250	6.000	1.370	1.500	DN..43..	**02089**[1)]	**02089**[1)]
MDQN R/L 24-4E	1.500	1.500	7.000	1.370	2.000	DN..43..	**02486**[1)]	**02486**[1)]

1) Not in stock

Spare parts for Article no.	Clamp 78 950 ...	Key I 78 950 ...	Dowel pin 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat D 78 950 ...
78 528 01293 / 78 529 01293	**00400**	**06900**	**03100**	**03800**	**04200**
78 528 01689 / 78 529 01689	**00400**	**06900**	**03100**	**03800**	**04200**
78 528 02089 / 78 529 02089	**00400**	**06900**	**03100**	**03800**	**04200**
78 528 02486 / 78 529 02486	**00400**	**06900**	**03100**	**03800**	**04200**

MaxiLock-D – DCMN + DDMN – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key

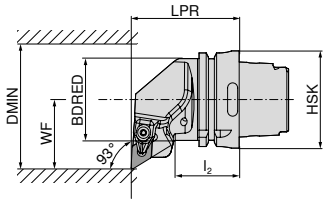
Designation	Adapter	LPR mm	BDRED mm	WF mm	HF mm	torque moment Nm	Insert	Neutral 74 600 ...
HSK T63 DCMN L 12 + DDMN L 15	HSK-T 63	115	53	0.5	20	4	CN.. 1204 / DN.. 1506	**501**
HSK T100 DCMN L 12 + DDMN L 15	HSK-T 100	150	88	0.5	20	4	CN.. 1204 / DN.. 1506	**701**

Face turning maximum 78 mm

Spare parts	 XPress type 70 950 ...		 Screwdriver 80 950 ...		 Clamping screw 70 950 ...		 Solid Carbide Seat D 70 950 ...		 Carbide type C 70 950 ...	
74 600 501 / 74 600 701		**824**	T15 - IP	**128**	M4.5x12 - IP	**820**		**811**		**810**

MaxiLock-D – DDUN 93° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key

Illustrations show right-hand versions

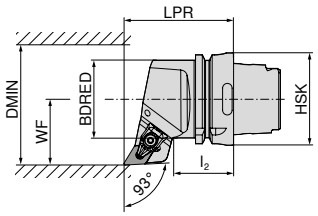
Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 516 ...	Right-hand 74 515 ...
HSK T63 DDUN R/L 15	HSK-T 63	70	42	53	45	125	4	DN.. 1506	**515**	**515**
HSK T100 DDUN R/L 15	HSK-T 100	80	45	88	55	125	4	DN.. 1506	**715**	**715**

Spare parts	 XPress type 70 950 ...		 Screwdriver 80 950 ...		 Clamping screw 70 950 ...		 Solid Carbide Seat D 70 950 ...	
74 516 515 / 74 515 715		**824**	T15 - IP	**128**	M4.5x12 - IP	**820**		**811**

9

MaxiLock-D – DDJN 93° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

	Left-hand	Right-hand
	74 512 ...	**74 511 ...**

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert		
HSK T63 DDJN R/L 15	HSK-T 63	75	42	53	45	125	4	DN.. 1506	**515**	**515**
HSK T100 DDJN R/L 15	HSK-T 100	85	45	88	55	125	4	DN.. 1506	**715**	**715**

XPress type

70 950 ...

Screwdriver

80 950 ...

Clamping screw

70 950 ...

Solid Carbide Seat D

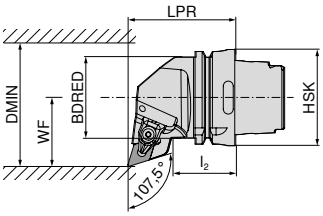
70 950 ...

Spare parts

74 512 515 / 74 511 715	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**811**

MaxiLock-D – DDHN 107.5° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

	Left-hand	Right-hand
	74 508 ...	**74 507 ...**

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert		
HSK T63 DDHN R/L 15	HSK-T 63	70	42	53	45	125	4	DN.. 1506	**515**	**515**

XPress type

70 950 ...

Screwdriver

80 950 ...

Clamping screw

70 950 ...

Solid Carbide Seat D

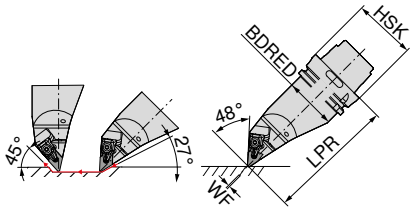
70 950 ...

Spare parts

74 508 515 / 74 507 515	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**811**

MaxiLock-D – DDMN 48° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key

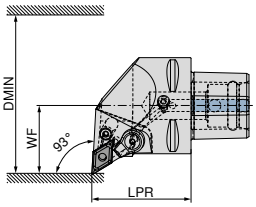
Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Left-hand 74 519 ...
HSK T63 DDMN L 15	HSK-T 63	130	53	0	4	DN.. 1506	**515**
HSK T100 DDMN L 15	HSK-T 100	160	88	0	4	DN.. 1506	**715**

Spare parts

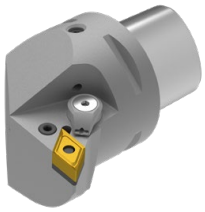
	 XPress type	 Screwdriver	 Clamping screw	 Solid Carbide Seat D
	70 950 ...	**80 950 ...**	**70 950 ...**	**70 950 ...**
74 519 515 / 74 519 715	**824**	**128**	**820**	**811**

MaxiLock-N – PDUN 93° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions



Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 661 ...	Right-hand 84 660 ...
PSC40 PDUN R/L 50050-15	PSC 40	50	27	50	5	DN.. 1504 / 1506	DC	**01595**	**01595**
PSC50 PDUN R/L 65060-15	PSC 50	60	35	65	5	DN.. 1504 / 1506	DC	**01594**	**01594**
PSC63 PDUN R/L 80065-15	PSC 63	65	45	80	5	DN.. 1504 / 1506	DC	**01593**	**01593**

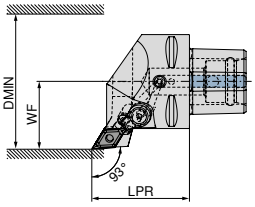
Spare parts

	 Shim		 Elbow lever screw	 Lever	 Solid Carbide Seat D
	84 950 ...		**84 950 ...**	**84 950 ...**	**84 950 ...**
84 660 01593 / 84 661 01595	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27900**

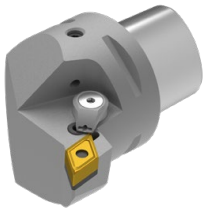
The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**
When using DN1504.. inserts Shim item no. **84 950 28200**

MaxiLock-N – PDJN 93° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions



Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 665 ...	Right-hand 84 664 ...
PSC40 PDJN R/L 50050-15	PSC 40	50	27	50	5	DN.. 1504 / 1506	DC	**01595**	**01595**
PSC50 PDJN R/L 65060-15	PSC 50	60	35	65	5	DN.. 1504 / 1506	DC	**01594**	**01594**
PSC63 PDJN R/L 80065-15	PSC 63	65	45	80	5	DN.. 1504 / 1506	DC	**01593**	**01593**


Shim **84 950 ...**


Elbow lever screw **84 950 ...**

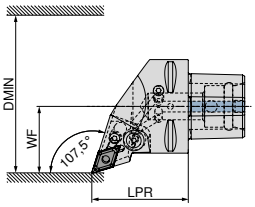

Lever **84 950 ...**


Solid Carbide Seat D **84 950 ...**

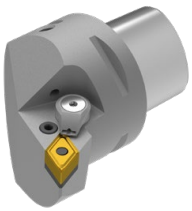
Spare parts Adapter				
PSC 40	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27900**
PSC 50	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27900**
PSC 63	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27900**

MaxiLock-N – PDHN 107.5° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions



Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 669 ...	Right-hand 84 668 ...
PSC40 PDHN R/L 50050-15	PSC 40	50	27	50	5	DN.. 1504 / 1506	DC	**01595**	**01595**
PSC50 PDHN R/L 65060-15	PSC 50	60	35	65	5	DN.. 1504 / 1506	DC	**01594**	**01594**
PSC63 PDHN R/L 80065-15	PSC 63	65	45	80	5	DN.. 1504 / 1506	DC	**01593**	**01593**


Shim **84 950 ...**


Elbow lever screw **84 950 ...**


Lever **84 950 ...**


Solid Carbide Seat D **84 950 ...**

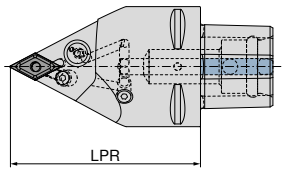
Spare parts				
84 668 01593 / 84 669 01595	**29200**	**28700**	**28900**	**27900**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

When using DN1504.. inserts Shim item no. **84 950 28200**

MaxiLock-N – PDNN 62.5° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Neutral
84 676 ...

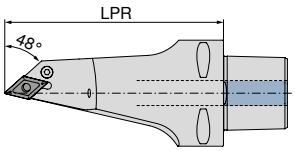
Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 PDNN N 0100-15	PSC 63	100	5	DN.. 1504 / 1506	DC	**01593**
PSC63 PDNN N 0130-15	PSC 63	130	5	DN.. 1504 / 1506	DC	**11593**

Spare parts

	 Shim	 Elbow lever screw	 Lever	 Solid Carbide Seat D
	84 950 ...	**84 950 ...**	**84 950 ...**	**84 950 ...**
84 676 01593 / 84 676 11593	**29200**	**28700**	**28900**	**27900**

MaxiLock-N – PDMN 48° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set

Neutral
84 680 ...

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 PDMN L 0130-15	PSC 63	130	5	DN.. 1504 / 1506	DC	**11593**

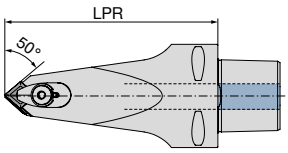
Spare parts

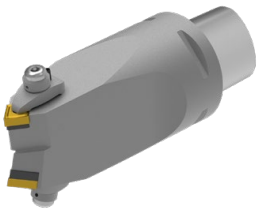
	 Shim	 Elbow lever screw	 Lever	 Solid Carbide Seat D
	84 950 ...	**84 950 ...**	**84 950 ...**	**84 950 ...**
84 680 11593	**29200**	**28700**	**28900**	**27900**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

When using DN1504.. inserts Shim item no. **84 950 28200**

MaxiLock-D – DCMN + DDMN 50°/48° – Toolholder with top clamping



Neutral

Designation	Adapter	LPR mm	torque moment Nm	Insert	84 683 ...
PSC63 DCMN-DDMN L 0130-12/15	PSC 63	130	10	CN.. 1204 / DN.. 1506	**01293**

Spare parts	 Clamping Screw 84 950 ...	 Clamping claw 84 950 ...	 Ring-shaped nozzle 84 950 ...	 Clamping screw 84 950 ...	 Solid Carbide Seat D 84 950 ...	 Carbide type C 84 950 ...
84 683 01293	**28300**	**28500**	**28400**	**27500**	**27900**	**27800**

High-performance coolant set

- ▲ Using the DC kit blocks the other coolant outlet so that all of the pressure is concentrated by the kit!
- ▲ Can be used up to 100 bar

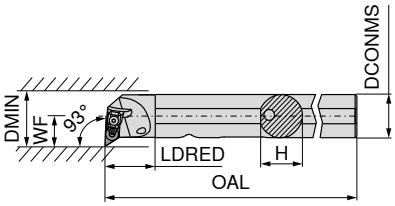
Scope of supply:
Direct cooling nozzle and O-ring

	84 950 ...
Coolant set	**27400**

MaxiLock-D – DDUN 93° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

	Left-hand	Right-hand
	78 703 ...	**78 702 ...**

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert		
S20U DDUN R/L 4N	1.250	1.118	14.000	1.771	0.765	1.530	DN..43..	**42030**[1)]	**42030**[1)]
S24U DDUN R/L 4N	1.500	1.370	14.000	1.968	0.890	1.780	DN..43..	**42434**[1)]	**42434**[1)]

1) Not in stock

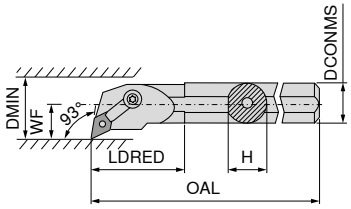
	 Clamping claw	 Key I	 Clamping screw	 Solid Carbide Seat D	 Threaded bush	 Spring
	78 950 ...	**78 950 ...**	**78 950 ...**	**78 950 ...**	**78 950 ...**	**78 950 ...**
Spare parts for Article no.						
78 702 42030 / 78 703 42030	**07600**	**08100**	**08300**	**04200**	**08500**	**04900**
78 702 42434 / 78 703 42434	**07600**	**08100**	**08300**	**04200**	**08500**	**04900**

9

MaxiLock-M – MDUL 93° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

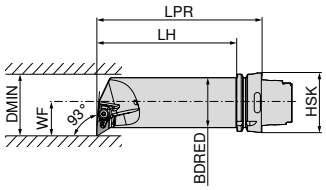
Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 707 ...	Right-hand 78 706 ...
S16T MDUN R/L 4	1.000	0.900	12.000	2.500	0.875	1.750	DN..43..	**41626**[1)]	**41626**[1)]
A16T MDUN R/L 4	1.000	0.900	12.000	2.500	0.875	1.750	DN..43..	**41616**	**41616**
S20U MDUN R/L 4	1.250	1.118	14.000	3.000	1.000	2.000	DN..43..	**42030**[1)]	**42030**[1)]
A20U MDUN R/L 4	1.250	1.118	14.000	3.000	1.000	2.000	DN..43..	**42020**[1)]	**42020**[1)]
S24U MDUN R/L 4	1.500	1.370	14.000	3.000	1.125	2.250	DN..43..	**42434**[1)]	**42434**[1)]
A24U MDUN R/L 4	1.500	1.370	14.000	3.000	1.125	2.250	DN..43..	**42424**	**42424**
S32V MDUN R/L 4	2.000	1.870	16.000	4.000	1.375	3.000	DN..43..	**43242**[1)]	**43242**[1)]
A32V MDUN R/L 4	2.000	1.870	16.000	4.000	1.375	3.000	DN..43..	**43233**[1)]	**43233**[1)]

1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat D 78 950 ...
78 706 41626 / 78 707 41626	**00400**	**06900**	**03000**	**03700**	
78 706 41616 / 78 707 41616	**00400**	**06900**	**03000**	**03700**	
78 706 42030 / 78 707 42030	**00400**	**06900**	**03100**	**03800**	**04200**
78 706 42020 / 78 707 42020	**00400**	**06900**	**03100**	**03800**	**04200**
78 706 42434 / 78 707 42434	**00400**	**06900**	**03100**	**03800**	**04200**
78 706 42424 / 78 707 42424	**00400**	**06900**	**03100**	**03800**	**04200**
78 706 43242 / 78 707 43242	**00400**	**06900**	**03100**	**03800**	**04200**
78 706 43233 / 78 707 43233	**00400**	**06900**	**03100**	**03800**	**04200**

MaxiLock-D – DDUN 93° – Boring bar with top clamping

Scope of supply:
Boring bar with Torx key



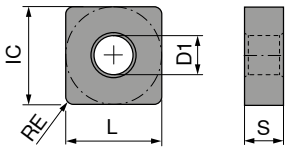
Illustrations show right-hand versions

Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 533 ...	Right-hand 74 532 ...
HSK T63 50Q DDUN R/L 15	HSK-T 63	175	149	50	35	63	4	DN.. 1506	**515**	**515**

Spare parts	 XPress type 70 950 ...		 Screwdriver 80 950 ...		 Clamping screw 70 950 ...	 Solid Carbide Seat D 70 950 ...
74 533 515 / 74 532 515	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**811**

SNMG / SNMA / SNMM

Designation	L inch	S inch	D1 inch	IC inch
SNMG 32..	0.3748	0.1252	0.1500	0.3748
SNM. 43..	0.5000	0.1874	0.2032	0.5000
SNM. 54..	0.6248	0.250	0.2500	0.6248
SNM. 64..	0.7500	0.250	0.3126	0.7500
SNMM 85..	1.0000	0.3126	0.3591	1.0000
SNMM 86..	1.0000	0.3748	0.3591	1.0000



SNMG

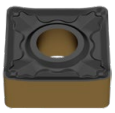
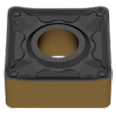
		NEW	NEW	NEW	NEW	NEW	NEW
		-F50 CTCP115-P	-F50 CTCP125-P	-F50 CTCP135-P	-M50 CTCP115-P	-M50 CTCP125-P	-M50 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		F	F	F	M	M	M
		SNMG	SNMG	SNMG	SNMG	SNMG	SNMG
		76 140 ...	76 140 ...	76 140 ...	76 137 ...	76 137 ...	76 137 ...
ANSI	RE inch						
322EN	0.0315	30601	50601	70601			
431EN	0.0157	31601	51601	71601			
432EN	0.0315	31801	51801	71801	31801	51801	71801
433EN	0.0472	32001	52001	72001	32001	52001	72001
434EN	0.0630				32201	52201	72201
542EN	0.0315				33001	53001	73001
543EN	0.0472				33201	53201	73201
544EN	0.0630				33401	53401	73401
P		●	●	●	●	●	●
M				○			○
K		○	○		○	○	
N							
S							
H							
O							

9

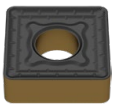
SNMG / SNMA

			NEW	NEW	NEW		
		-M70 CTCK110	-M70 CTCP115-P	-M70 CTCP125-P	-M70 CTCP135-P	-M70 CTCK120	CTCK110
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		M	M	M	M	M	R
		SNMG	SNMG	SNMG	SNMG	SNMG	SNMA
		70 225 ...	76 225 ...	76 225 ...	76 225 ...	70 225 ...	70 114 ...
ANSI	RE inch						
432EN	0.0315	018	31801	51801	71801	518	018
433EN	0.0472	020	32001	52001	72001	520	020
434EN	0.0630	022	32201	52201	72201	522	022
543EN	0.0472	032	33201	53201	73201	532	032
544EN	0.0630	034	33401	53401	73401	534	034
643EN	0.0472	044	34401	54401	74401	544	044
644EN	0.0630	046	34601	54601	74601	546	046
646EN	0.0945		34801	54801	74801		
P		○	●	●	●	○	○
M					○		
K		●	○	○		●	●
N							
S							
H							
O							

SNMA / SNMM

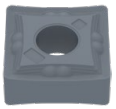
			NEW	NEW	NEW	NEW	NEW	NEW
		CTCK120	-R28 CTCP115-P	-R28 CTCP125-P	-R28 CTCP135-P	-R58 CTCP115-P	-R58 CTCP125-P	-R58 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		R	R	R	R	R	R	R
		SNMA	SNMM	SNMM	SNMM	SNMM	SNMM	SNMM
		70 114 ...	76 128 ...	76 128 ...	76 128 ...	76 129 ...	76 129 ...	76 129 ...
ANSI	RE inch							
432EN	0.0315	518				31801	51801	71801
433EN	0.0472	520				32001	52001	72001
434EN	0.0630	522						
543EN	0.0472	532	33201	53201	73201	33201	53201	73201
544EN	0.0630	534	33401	53401	73401	33401	53401	73401
643EN	0.0472	544				34401	54401	74401
644EN	0.0630	546	34601	54601	74601	34601	54601	74601
646EN	0.0945					34801	54801	74801
856EN	0.0945				76001	36001	56001	76001
866EN	0.0945		37001	57001	77001	37001	57001	77001
P		○	●	●	●	●	●	●
M					○			○
K		●	○	○		○	○	
N								
S								
H								
O								

SNMM

					NEW	NEW	NEW
					-R88 CTCP115-P	-R88 CTCP125-P	-R88 CTCP135-P
					DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
					R	R	R
					SNMM	SNMM	SNMM
					76 130 ...	76 130 ...	76 130 ...
ANSI	RE inch						
644SN	0.0630				34601	54601	74601
646SN	0.0945				34801	54801	74801
856SN	0.0945				36001	56001	76001
866SN	0.0945				37001	57001	77001
P					●	●	●
M							○
K					○	○	
N							
S							
H							
O							

9

SNMG

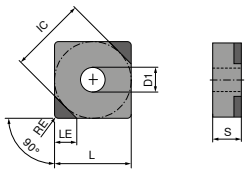
	-F30 CTCM120	-F30 CTPM125	-F30 CTCM130	-M30 CTCM120	-M30 CTPM125	-M30 CTCM130
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
	F	F	F	M	M	M
	SNMG	SNMG	SNMG	SNMG	SNMG	SNMG
	75 016 ...	75 016 ...	75 016 ...	75 017 ...	75 017 ...	75 017 ...
ANSI RE inch						
431EN 0.0157	11600	216	31600			
432EN 0.0315	11800	218	31800	11800	218	31800
433EN 0.0472				12000		32000
P	○	○	○	○	○	○
M	●	●	●	●	●	●
K						
N						
S			○			○
H						
O						

SNMG

	NEW				NEW	
	-M42 CTCM130	-M60 CTCM120	-M60 CTPM125	-M60 CTCM130	-M70 CTCM130	-M34 CTPX710
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
	M	M	M	M	M	M
	SNMG	SNMG	SNMG	SNMG	SNMG	SNMG
	75 034 ...	75 018 ...	75 018 ...	75 018 ...	75 039 ...	75 005 ...
ANSI RE inch						
432EN 0.0315	31800	11800	218	31800	31800	61800
433EN 0.0472	32000	12000	210	32000	32000	62000
434EN 0.0630		12200	220	32200		
644EN 0.0630					34600	
P	○	○	○	○	○	●
M	●	●	●	●	●	●
K						
N						○
S	○			○	○	●
H						
O						

SNGA

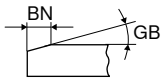
Designation	L inch	S inch	D1 inch	IC inch
SNGA 432E..	0.500	0.1874	0.2032	0.500
SNGA 432S..	0.500	0.1874	0.2032	0.500
SNGA 433E..	0.500	0.1874	0.2032	0.500
SNGA 433S..	0.500	0.1874	0.2032	0.500

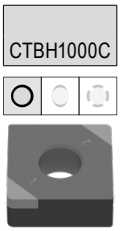
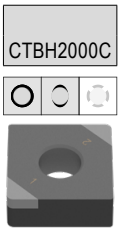
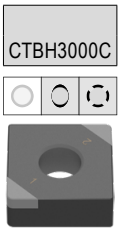


SNGA B

SNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



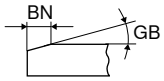
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	F	F	F
	PCBN SNGA	PCBN SNGA	PCBN SNGA
	71 039 ...	71 039 ...	71 039 ...

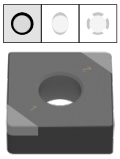
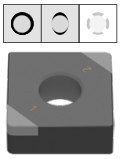
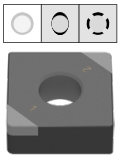
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch					
432EN	0.0315			**B (2)**	0.1496	**70002**		**80002**		
432SN	0.0315	0.0055	20°	**B (2)**	0.1496		**90002**			**90002**
433EN	0.0472			**B (2)**	0.1496	**70302**		**80302**		
433SN	0.0472	0.0055	20°	**B (2)**	0.1496		**90302**			**90302**
P										
M										
K										
N										
S										
H						●		●		●
O										

9

SNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners

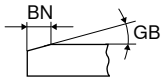


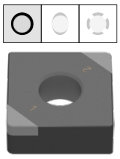
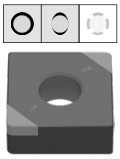
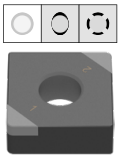
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN SNGA	PCBN SNGA	PCBN SNGA
	71 039 ...	71 039 ...	71 039 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
432SN	0.0315	0.0035	15°	B (2)	0.1496	70102	80102	
432SN	0.0315	0.0071	25°	B (2)	0.1496			90102
433SN	0.0472	0.0035	15°	B (2)	0.1496	70402	80402	
433SN	0.0472	0.0071	25°	B (2)	0.1496			90402
P								
M								
K								
N								
S								
H						●	●	●
O								

SNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



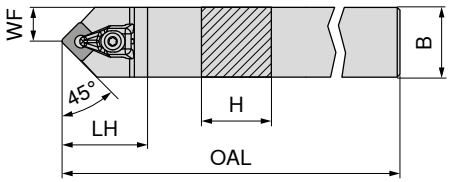
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN SNGA	PCBN SNGA	PCBN SNGA
	71 039 ...	71 039 ...	71 039 ...

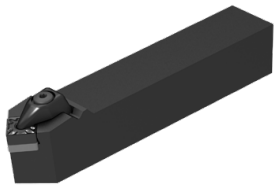
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
432SN	0.0315	0.0055	20°	B (2)	0.1496	70202	80202	
432SN	0.0315	0.0079	35°	B (2)	0.1496			90202
433SN	0.0472	0.0055	20°	B (2)	0.1496	70502	80502	
433SN	0.0472	0.0079	35°	B (2)	0.1496			90502
P								
M								
K								
N								
S								
H						●	●	●
O								

MaxiLock-D – DSDN 45° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key





Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 574 ...
DSDN N 12-4BA-N	0.750	0.750	4.500	1.380	0.375	SN..43..	**01224**[1]
DSDN N 16-4DA-N	1.000	1.000	6.000	1.457	0.500	SN..43..	**01690**
DSDN N 20-5DA-N	1.250	1.250	6.000	1.535	0.625	SN..54..	**02085**
DSDN N 20-6DA-N	1.250	1.250	6.000	1.535	0.625	SN..64..	**02081**[1]
DSDN N 24-6EA-N	1.500	1.500	7.000	1.650	0.750	SN..64..	**02479**[1]

1) Not in stock

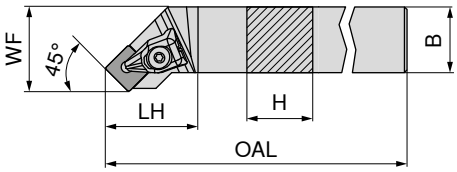
Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 574 01224	**07600**	**08100**	**08300**		**08500**	**04900**
78 574 02081	**07800**	**08100**	**08300**	**01700**	**08700**	**04900**
78 574 02479	**07800**	**08100**	**08300**	**01700**	**08700**	**04900**

9

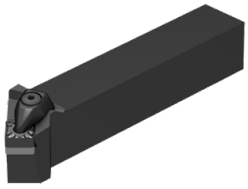
MaxiLock-D – DSSN 45° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 507 ...	Right-hand 78 506 ...
DSSN R/L 12-4B-N	0.750	0.750	4.500	1.457	1.000	SN..43..	**01293**[1]	**01293**[1]
DSSN R/L 16-4D-N	1.000	1.000	6.000	1.457	1.250	SN..43..	**01689**[1]	**01689**[1]
DSSN R/L 20-4D-N	1.250	1.250	6.000	1.457	1.500	SN..43..	**02089**[1]	**02089**[1]
DSSN R/L 20-6D-N	1.250	1.250	6.000	1.772	1.500	SN..64..	**02080**[1]	**02080**[1]
DSSN R/L 24-6E-N	1.500	1.500	7.000	1.772	2.000	SN..64..	**02477**[1]	**02477**[1]

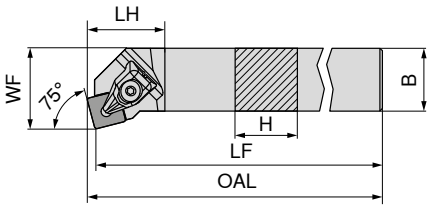
1) Not in stock

Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 506 01293 / 78 507 01293	**07600**	**08100**	**08300**		**08500**	**04900**
78 506 01689 / 78 507 01689	**07600**	**08100**	**08300**		**08500**	**04900**
78 506 02089 / 78 507 02089	**07600**	**08100**	**08300**		**08500**	**04900**
78 506 02080 / 78 507 02080	**07800**	**08100**	**08300**	**01700**	**08700**	**04900**
78 506 02477 / 78 507 02477	**07800**	**08100**	**08300**	**01700**	**08700**	**04900**

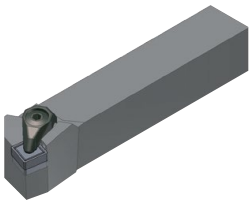
MaxiLock-D – DSRN 75° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



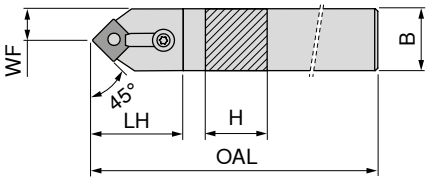
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 505 ...	Right-hand 78 504 ...
DSRN R/L 12-4BA-N	0.750	0.750	4.500	1.380	0.880	SN..43..	**01294**[1)]	**01294**[1)]
DSRN R/L 16-4DA-N	1.000	1.000	6.000	1.380	1.130	SN..43..	**01690**[1)]	**01690**[1)]
DSRN R/L 20-5DA-N	1.250	1.250	6.000	1.380	1.353	SN..54..	**02085**[1)]	**02085**[1)]
DSRN R/L 20-6DA-N	1.250	1.250	6.000	1.380	1.321	SN..64..	**02081**[1)]	**02081**[1)]

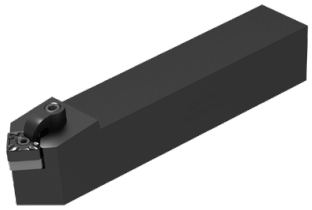
1) Not in stock

Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 504 01294 / 78 505 01294	**07600**	**08100**	**08300**		**08500**	**04900**
78 504 01690 / 78 505 01690	**07600**	**08100**	**08300**		**08500**	**04900**
78 504 02085 / 78 505 02085	**07700**	**08100**	**08300**	**01600**	**08600**	**04900**
78 504 02081 / 78 505 02081	**07800**	**08100**	**08300**	**01700**	**08700**	**04900**

MaxiLock-M – MSDN 45° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





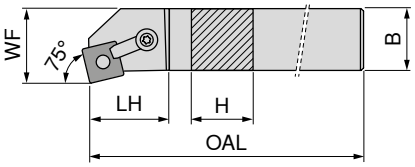
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 577 ...
MSDN N 08-3A	0.500	0.500	4.000	1.000	0.250	SN..32..	**00813**[1]
MSDN N 10-3B	0.625	0.625	4.500	1.000	0.313	SN..32..	**01023**[1]
MSDN N 12-4B	0.750	0.750	4.500	1.300	0.375	SN..43..	**01224**[1]
MSDN N 16-4D	1.000	1.000	6.000	1.300	0.500	SN..43..	**01644**[1]
MSDN N 85-4D	1.250	1.000	6.000	1.300	0.625	SN..43..	**08544**[1]
MSDN N 16-5D	1.000	1.000	6.000	1.500	0.500	SN..54..	**01645**[1]
MSDN N 85-5D	1.250	1.000	6.000	1.500	0.625	SN..54..	**08545**[1]
MSDN N 20-5D	1.250	1.250	6.000	1.500	0.625	SN..54..	**02045**[1]
MSDN N 16-6D	1.000	1.000	6.000	1.730	0.500	SN..64..	**01646**[1]
MSDN N 85-6D	1.250	1.000	6.000	1.750	0.625	SN..64..	**08546**[1]
MSDN N 20-6D	1.250	1.250	6.000	1.750	0.625	SN..64..	**02046**[1]
MSDN N 24-6E	1.500	1.500	7.000	1.750	0.750	SN..64..	**02456**[1]

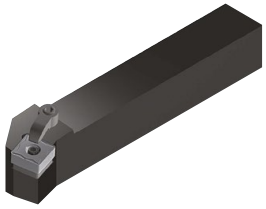
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...
78 577 00813	**00600**	**07000**		**03600**	**01500**
78 577 01023	**00600**	**07000**		**03600**	**01500**
78 577 01224	**00400**	**06900**	**03100**	**03800**	**04300**
78 577 01644	**00400**	**06900**	**03100**	**03800**	**04300**
78 577 08544	**00400**	**06900**	**03100**	**03800**	**04300**
78 577 01645	**00300**	**08100**	**03200**	**03900**	**01600**
78 577 08545	**00300**	**08100**	**03200**	**03900**	**01600**
78 577 02045	**00300**	**08100**	**03200**	**03900**	**01600**
78 577 01646	**00300**	**08100**	**03300**	**03900**	**01700**
78 577 08546	**00300**	**08100**	**03300**	**03900**	**01700**
78 577 02046	**00300**	**08100**	**03300**	**03900**	**01700**
78 577 02456	**00300**	**08100**	**03300**	**03900**	**01700**

MaxiLock-M – MSKN 75° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

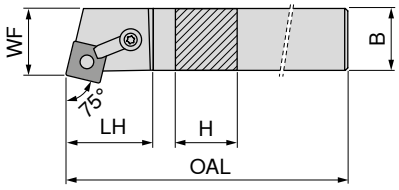
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 533 ...	Right-hand 78 532 ...
MSKN R/L 12-4B	0.750	0.750	4.500	1.220	1.000	SN..43..	**01224**[1)]	**01224**[1)]
MSKN R/L 16-4D	1.000	1.000	6.000	1.220	1.250	SN..43..	**01644**[1)]	**01644**[1)]
MSKN R/L 16-5D	1.000	1.000	6.000	1.410	1.250	SN..54..	**01645**[1)]	**01645**[1)]
MSKN R/L 85-5D	1.250	1.000	6.000	1.410	1.250	SN..54..	**08545**[1)]	**08545**[1)]
MSKN R/L 20-5D	1.250	1.250	6.000	1.410	1.500	SN..54..	**02045**[1)]	**02045**[1)]
MSKN R/L 20-6D	1.250	1.250	6.000	1.500	1.500	SN..64..	**02046**[1)]	**02046**[1)]
MSKN R/L 24-6E	1.500	1.500	7.000	1.500	2.000	SN..64..	**02456**[1)]	**02456**[1)]

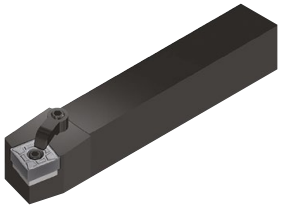
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...
78 532 01224 / 78 533 01224	**00400**	**06900**	**03100**	**03800**	**04300**
78 532 01644 / 78 533 01644	**00400**	**06900**	**03100**	**03800**	**04300**
78 532 01645 / 78 533 01645	**00300**	**08100**	**03200**	**03900**	**01600**
78 532 08545 / 78 533 08545	**00300**	**08100**	**03200**	**03900**	**01600**
78 532 02045 / 78 533 02045	**00300**	**08100**	**03200**	**03900**	**01600**
78 532 02046 / 78 533 02046	**00300**	**08100**	**03300**	**03900**	**01700**
78 532 02456 / 78 533 02456	**00300**	**08100**	**03300**	**03900**	**01700**

MaxiLock-M – MSRN 75° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

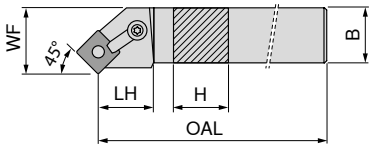
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 535 ...	Right-hand 78 534 ...
MSRN R/L 12-4B	0.750	0.750	4.500	1.250	0.880	SN..43..	**01224**[1)]	**01224**[1)]
MSRN R/L 16-4D	1.000	1.000	6.000	1.250	1.130	SN..43..	**01644**[1)]	**01644**[1)]
MSRN R/L 16-5D	1.000	1.000	6.000	1.500	1.103	SN..54..	**01645**[1)]	**01645**[1)]
MSRN R/L 20-5D	1.250	1.250	6.000	1.500	1.353	SN..54..	**02045**[1)]	**02045**[1)]
MSRN R/L 20-6D	1.250	1.250	6.000	1.590	1.321	SN..64..	**02046**[1)]	**02046**[1)]
MSRN R/L 24-6E	1.500	1.500	7.000	1.590	1.821	SN..64..	**02456**[1)]	**02456**[1)]

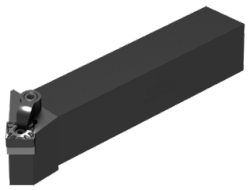
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...
78 534 01224 / 78 535 01224	**00400**	**06900**	**03100**	**03800**	**04300**
78 534 01644 / 78 535 01644	**00400**	**06900**	**03100**	**03800**	**04300**
78 534 01645 / 78 535 01645	**00300**	**08100**	**03200**	**03900**	**01600**
78 534 02045 / 78 535 02045	**00300**	**08100**	**03200**	**03900**	**01600**
78 534 02046 / 78 535 02046	**00300**	**08100**	**03300**	**03900**	**01700**
78 534 02456 / 78 535 02456	**00300**	**08100**	**03300**	**03900**	**01700**

MaxiLock-M – MSSN 45° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

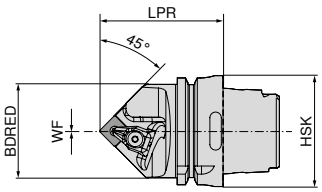
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 537 ...	Right-hand 78 536 ...
MSSN R/L 12-4B	0.750	0.750	4.500	1.230	0.675	SN..43..	**01224**[1)]	**01224**[1)]
MSSN R/L 16-4D	1.000	1.000	6.000	1.230	0.925	SN..43..	**01644**[1)]	**01644**[1)]
MSSN R/L 16-5D	1.000	1.000	6.000	1.380	0.847	SN..54..	**01645**[1)]	**01645**[1)]
MSSN R/L 20-5D	1.250	1.250	6.000	1.380	1.097	SN..54..	**02045**[1)]	**02045**[1)]
MSSN R/L 20-6D	1.250	1.250	6.000	1.470	1.010	SN..64..	**02046**[1)]	**02046**[1)]
MSSN R/L 24-6E	1.500	1.500	7.000	1.470	1.511	SN..64..	**02456**[1)]	**02456**[1)]
MSSN R/L 86-6E	1.500	1.000	7.000	1.470	0.761	SN..64..	**08656**[1)]	**08656**[1)]

1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...
78 536 01224 / 78 537 01224	**00400**	**06900**	**03100**	**03800**	**04300**
78 536 01644 / 78 537 01644	**00400**	**06900**	**03100**	**03800**	**04300**
78 536 01645 / 78 537 01645	**00300**	**08100**	**03200**	**03900**	**01600**
78 536 02045 / 78 537 02045	**00300**	**08100**	**03200**	**03900**	**01600**
78 536 02046 / 78 537 02046	**00300**	**08100**	**03300**	**03900**	**01700**
78 536 02456 / 78 537 02456	**00300**	**08100**	**03300**	**03900**	**01700**
78 536 08656 / 78 537 08656	**00300**	**08100**	**03300**	**03900**	**01700**

MaxiLock-D – DSDN 45° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key



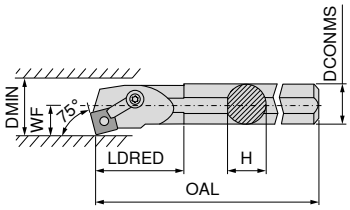
Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Neutral 74 522 ...
HSK T63 DSDN N 12	HSK-T 63	70	53	0	4	SN.. 1204	**512**
HSK T63 DSDN N 15	HSK-T 63	75	53	0	4	SN.. 1506	**515**
HSK T100 DSDN N 12	HSK-T 100	80	88	0	4	SN.. 1204	**712**
HSK T100 DSDN N 19	HSK-T 100	85	88	0	8	SN.. 1906	**719**

Spare parts	 XPress type 70 950 ...		Screwdriver 80 950 ...		 Clamping screw 70 950 ...		 Solid Carbide support S 70 950 ...
74 522 515	**825**	T20 - IP	**129**	M5x14 - IP	**821**		**833**
74 522 512 / 74 522 712	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**		**813**
74 522 719	**826**	T20 - IP	**129**	M5x14 - IP	**821**		**817**

MaxiLock-M – MSKN 75° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

Designation	H inch	OAL inch	LDRED inch	WF inch	Insert	Left-hand 78 709 ...	Right-hand 78 708 ...
S20U MSKN R/L 4	1.180	14.000	3.000	0.765	SN..43..	**42030**[1)]	**42030**[1)]
S24U MSKN R/L 4	1.370	14.000	3.000	0.890	SN..43..	**42434**[1)]	**42434**[1)]
S32V MSKN R/L 5	1.870	16.000	4.000	1.281	SN..54..	**53242**[1)]	**53242**[1)]
S32V MSKN R/L 6	1.870	16.000	4.000	1.281	SN..64..	**63242**[1)]	**63242**[1)]
S40V MSKN R/L 6	2.380	16.000	4.000	1.531	SN..64..	**64050**[1)]	**64050**[1)]

1) Not in stock

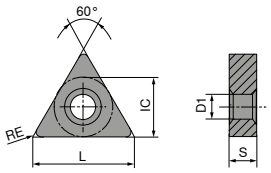
Spare parts

	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide support S 78 950 ...
78 708 53242 / 78 709 53242	**00300**	**08100**	**03200**	**03900**	**01600**
78 708 42030 / 78 709 42434	**00400**	**06900**	**03100**	**03800**	**04300**
78 708 63242 / 78 709 64050	**00300**	**08100**	**03300**	**03900**	**01700**

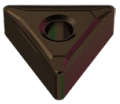
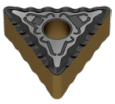
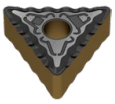
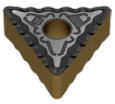
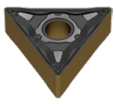
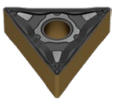
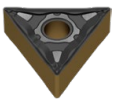
9

TNMG / TNMA / TNMM

Designation	L inch	S inch	D1 inch	IC inch
TNMG 22..	0.4331	0.1252	0.0890	0.2500
TNM. 33..	0.6496	0.1874	0.1500	0.3748
TNM. 43..	0.8661	0.1874	0.2032	0.5000



TNMG

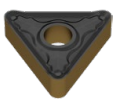
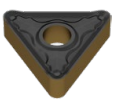
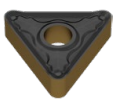
	NEW	NEW	NEW	NEW	NEW	NEW
-CF20 CTEP110	-F50 CTCP115-P	-F50 CTCP125-P	-F50 CTCP135-P	-M50 CTCP115-P	-M50 CTCP125-P	-M50 CTCP135-P
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
F	F	F	F	M	M	M
CERMET						
TNMG	TNMG	TNMG	TNMG	TNMG	TNMG	TNMG
76 149 ...	76 146 ...	76 146 ...	76 146 ...	76 138 ...	76 138 ...	76 138 ...

ANSI	RE inch													
221EN	0.0157			30401		50401		70401						
222EN	0.0315			30601		50601		70601						
331EN	0.0157	016		31601		51601		71601		31601		51601		71601
332EN	0.0315	018		31801		51801		71801		31801		51801		71801
333EN	0.0472	020		32001		52001		72001		32001		52001		72001
432EN	0.0315									33001		53001		73001
433EN	0.0472									33201		53201		73201
P		●		●		●		●		●		●		●
M		○						○						○
K		○		○		○				○		○		
N														
S														
H														
O														

TNMG

		-M70 CTCK110	-M70 CTCK120	NEW -M70 CTCP115-P	NEW -M70 CTCP125-P	NEW -M70 CTCP135-P	NEW CTCP125-P	NEW CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	M
		TNMG	TNMG	TNMG	TNMG	TNMG	TNMG	TNMG
		70 155 ...	70 155 ...	76 155 ...	76 155 ...	76 155 ...	76 142 ...	76 142 ...
ANSI	RE inch							
331ER	0.0157						51601	71601
332EL	0.0315						51801	
332EN	0.0315	018	518	31801	51801	71801		
332ER	0.0315						51701	71801
333EN	0.0472	020	520	32001	52001	72001		
431EN	0.0157				52801			
432EN	0.0315	030	530	33001	53001	73001		
433EN	0.0472	032	532	33201	53201	73201		
434EN	0.0630	034	534	33401	53401	73401		
P		○	○	●	●	●	●	●
M						○		○
K		●	●	○	○		○	
N								
S								
H								
O								

TNMA / TNMM

		CTCK110	CTCK120	NEW -R28 CTCP115-P	NEW -R28 CTCP125-P	NEW -R28 CTCP135-P	NEW -R58 CTCP115-P	NEW -R58 CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		R	M	R	R	R	R	R
		TNMA	TNMA	TNMM	TNMM	TNMM	TNMM	TNMM
		70 134 ...	70 134 ...	76 154 ...	76 154 ...	76 154 ...	76 152 ...	76 152 ...
ANSI	RE inch							
332EN	0.0315	018	518					
333EN	0.0472	020	520					
334EN	0.0630	022	522					
432EN	0.0315	030	530					
433EN	0.0472	032	532				33201	53201
434EN	0.0630	034	534	33401	53401	73401		
P		○	○	●	●	●	●	●
M						○		
K		●	●	○	○		○	○
N								
S								
H								
O								

9

TNMM / TNMG

NEW

	-R58 CTCP135-P	-F30 CTCM120	-F30 CTPM125	-F30 CTCM130	-M30 CTCM120	-M30 CTPM125	-M30 CTCM130
DRAGONSKIN							
							
	R	F	F	F	M	M	M
	TNMM	TNMG	TNMG	TNMG	TNMG	TNMG	TNMG
	76 152 ...	75 019 ...	75 019 ...	75 019 ...	75 020 ...	75 020 ...	75 020 ...
ANSI / RE inch							
331EN 0.0157		11600	216	31600			
332EN 0.0315		11800	218	31800	11800	218	31800
333EN 0.0472					12000	220	32000
433EN 0.0472	73201						
P	●	○	○	○	○	○	○
M	○	●	●	●	●	●	●
K							
N							
S				○			○
H							
O							

TNMG

	-M60 CTCM120	-M60 CTPM125	-M60 CTCM130	-M34 CTPX710
DRAGONSKIN				
				
	M	M	M	M
	TNMG	TNMG	TNMG	TNMG
	75 021 ...	75 021 ...	75 021 ...	75 006 ...
ANSI / RE inch				
332EN 0.0315	11800	218	31800	61800
333EN 0.0472	12000	220	32000	
431EN 0.0157				62800
432EN 0.0315				63000
434EN 0.0630				63400
P	○	○	○	●
M	●	●	●	●
K				
N				○
S			○	●
H				
O				

TNMG

NEW

-M42
CTCM130

DRAGONSKIN

M

TNMG

75 035 ...

NEW

-M70
CTCM130

DRAGONSKIN

M

TNMG

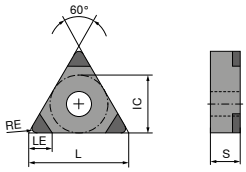
75 040 ...

ANSI	RE inch		
331EN	0.0157	**31600**	
332EN	0.0315	**31800**	**31800**
333EN	0.0472		**32000**
433EN	0.0472		**33200**
P		○	○
M		●	●
K			
N			
S		○	○
H			
O			

9

TNGA

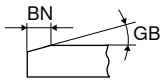
Designation	L inch	S inch	D1 inch	IC inch
TNGA 331E..	0.6496	0.1874	0.150	0.3748
TNGA 331S..	0.6496	0.1874	0.150	0.3748
TNGA 332E..	0.6496	0.1874	0.150	0.3748
TNGA 332S..	0.6496	0.1874	0.150	0.3748
TNGA 333E..	0.6496	0.1874	0.150	0.3748
TNGA 333S..	0.6496	0.1874	0.150	0.3748



TNGA C

TNGA

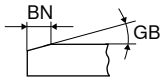
▲ TCE(NOI) = Design and number of equipped cutting edge corners

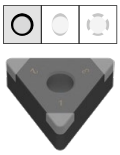
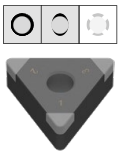
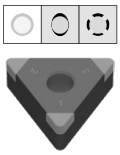


ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch	NEW CTBH1000C F PCBN TNGA 71 040 ...	NEW CTBH2000C F PCBN TNGA 71 040 ...	NEW CTBH3000C F PCBN TNGA 71 040 ...
331EN	0.0157			**C (3)**	0.1417	**70002**	**80002**	
331SN	0.0157	0.0055	20°	**C (3)**	0.1417			**90002**
332EN	0.0315			**C (3)**	0.1299	**70302**	**80302**	
332SN	0.0315	0.0055	20°	**C (3)**	0.1299			**90302**
333EN	0.0472			**C (3)**	0.1181	**70602**	**80602**	
333SN	0.0472	0.0055	20°	**C (3)**	0.1181			**90602**
P								
M								
K								
N								
S								
H						●	●	●
O								

TNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN TNGA	PCBN TNGA	PCBN TNGA
	71 040 ...	71 040 ...	71 040 ...

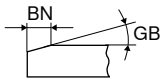
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
331SN	0.0157	0.0035	15°	C (3)	0.1417	70102	80102	
331SN	0.0157	0.0071	25°	C (3)	0.1417			90102
332SN	0.0315	0.0035	15°	C (3)	0.1299	70402	80402	
332SN	0.0315	0.0071	25°	C (3)	0.1299			90402
333SN	0.0472	0.0035	15°	C (3)	0.1181	70702	80702	
333SN	0.0472	0.0071	25°	C (3)	0.1181			90702

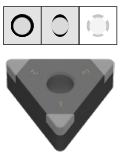
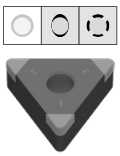
P			
M			
K			
N			
S			
H	●	●	●
O			

9

TNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN TNGA	PCBN TNGA	PCBN TNGA
	71 040 ...	71 040 ...	71 040 ...

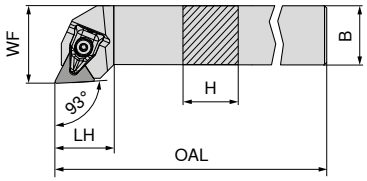
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
331SN	0.0157	0.0055	20°	C (3)	0.1417	70202	80202	
331SN	0.0157	0.0079	35°	C (3)	0.1417			90202
332SN	0.0315	0.0055	20°	C (3)	0.1299	70502	80502	
332SN	0.0315	0.0079	35°	C (3)	0.1299			90502
333SN	0.0472	0.0055	20°	C (3)	0.1181	70802	80802	
333SN	0.0472	0.0079	35°	C (3)	0.1181			90802

P			
M			
K			
N			
S			
H	●	●	●
O			

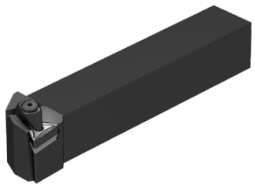
MaxiLock-D – DTJN 93° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 511 ...	Right-hand 78 510 ...
DTJN R/L 12-3BA-N	0.750	0.750	4.500	1.250	1.000	TN..33..	**01276**	**01276**
DTJN R/L 16-3DA-N	1.000	1.000	6.000	1.250	1.250	TN..33..	**01698**[1)]	**01698**[1)]
DTJN R/L 16-4DA-N	1.000	1.000	6.000	1.380	1.250	TN..43..	**01690**[1)]	**01690**[1)]
DTJN R/L 20-4DA-N	1.250	1.250	6.000	1.250	1.500	TN..43..	**02090**	**02090**
DTJN R/L 24-4EA-N	1.500	1.500	7.000	1.380	2.000	TN..43..	**02487**[1)]	**02487**[1)]

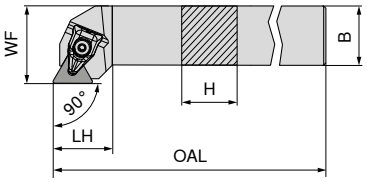
1) Not in stock

Spare parts for Article no.	Clamping claw 78 950 ...	Key I 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat T 78 950 ...	Threaded bush 78 950 ...	Spring 78 950 ...
78 510 01698 / 78 511 01698	**07500**	**08100**	**07900**	**07400**	**08400**	**08000**
78 510 01690 / 78 511 01690	**07600**	**08100**	**08300**	**01900**	**08500**	**04900**
78 510 02090 / 78 511 02090	**07600**	**08100**	**08300**	**01900**	**08500**	**04900**
78 510 02487 / 78 511 02487	**07600**	**08100**	**08300**	**01900**	**08500**	**04900**

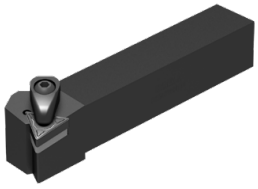
MaxiLock-D – DTGN 90° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

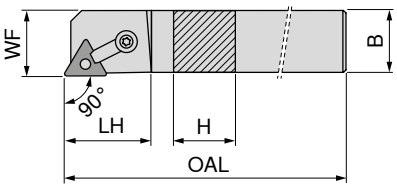


Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 509 ...	Right-hand 78 508 ...
DTGN R/L 12-3B-N	0.750	0.750	4.500	1.100	1.000	TN..33..	**01299**	**01299**
DTGN R/L 16-3D-N	1.000	1.000	6.000	1.100	1.250	TN..33..	**01697**	**01697**
DTGN R/L 16-4D-N	1.000	1.000	6.000	1.338	1.250	TN..43..	**01689**	**01689**
DTGN R/L 20-4D-N	1.250	1.250	6.000	1.338	1.500	TN..43..	**02089**	**02089**

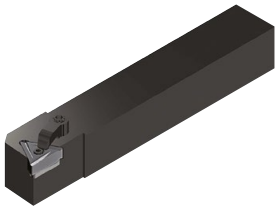
Spare parts for Article no.	Clamping claw 78 950 ...	Key I 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat T 78 950 ...	Threaded bush 78 950 ...	Spring 78 950 ...
78 508 01299 / 78 509 01299	**07500**	**08100**	**07900**	**07400**	**08400**	**08000**
78 508 01697 / 78 509 01697	**07500**	**08100**	**07900**	**07400**	**08400**	**08000**
78 508 01689 / 78 509 01689	**07600**	**08100**	**08300**	**01900**	**08500**	**04900**
78 508 02089 / 78 509 02089	**07600**	**08100**	**08300**	**01900**	**08500**	**04900**

MaxiLock-M – MTAN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 539 ...	Right-hand 78 538 ...
MTAN R/L 08-2A	0.500	0.500	4.000	0.875	0.500	TN..22..	**00812**[1)]	**00812**[1)]
MTAN R/L 12-3B	0.750	0.750	4.500	1.060	0.750	TN..33..	**01223**[1)]	**01223**[1)]
MTAN R/L 16-3D	1.000	1.000	6.000	1.060	1.000	TN..33..	**01643**[1)]	**01643**[1)]
MTAN R/L 16-4D	1.000	1.000	6.000	1.220	1.000	TN..43..	**01644**[1)]	**01644**[1)]

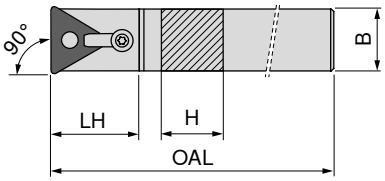
1) Not in stock

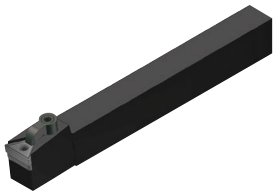
Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 538 00812 / 78 539 00812	**00700**	**07000**		**05000**	
78 538 01223 / 78 539 01223	**00400**	**06900**	**02900**	**03800**	**01800**
78 538 01643 / 78 539 01643	**00400**	**06900**	**02900**	**03800**	**01800**
78 538 01644 / 78 539 01644	**00400**	**06900**	**03100**	**03800**	**01900**

9

MaxiLock-M – MTCN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





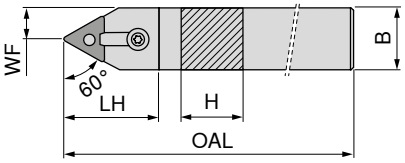
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 578 ...
MTCN N 44-3F	1.000	0.500	8.000	1.000	0.325	TN..33..	**04463**[1)]
MTCN N 12-4B	0.750	0.750	4.500	1.380	0.433	TN..43..	**01224**[1)]
MTCN N 64-4F	1.000	0.750	8.000	1.380	0.433	TN..43..	**06464**[1)]
MTCN N 66-4F	1.500	0.750	8.000	1.380	0.433	TN..43..	**06664**[1)]

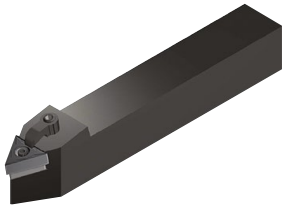
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 578 04463	**00400**	**06800**	**02900**	**04000**	**01800**
78 578 01224	**00400**	**07000**	**03100**	**03800**	**01900**
78 578 06464	**00300**	**07000**	**03100**	**03900**	**01900**
78 578 06664	**00300**	**07000**	**03100**	**03900**	**01900**

MaxiLock-M – MTEN 60° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





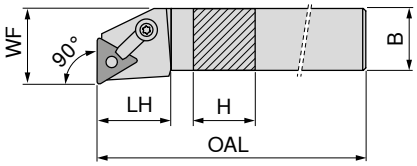
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 580 ...
MTEN NS 08-2A	0.500	0.500	4.000	1.000	0.250	TN..22..	**00812**[1)]
MTEN NS 10-3B	0.625	0.625	4.500	1.130	0.313	TN..33..	**01023**[1)]
MTEN NS 12-3B	0.750	0.750	4.500	1.300	0.375	TN..33..	**01223**[1)]
MTEN NS 16-3D	1.000	1.000	6.000	1.300	0.500	TN..33..	**01643**[1)]
MTEN NS 16-4D	1.000	1.000	6.000	1.500	0.500	TN..43..	**01644**[1)]

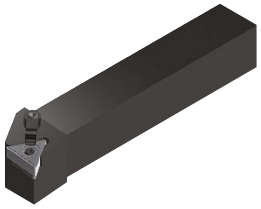
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 580 00812	**00700**	**07000**		**05000**	
78 580 01023	**00600**	**06800**	**02900**	**03600**	**01800**
78 580 01223	**00400**	**06800**	**02900**	**03800**	**01800**
78 580 01643	**00400**	**06800**	**02900**	**03800**	**01800**
78 580 01644	**00400**	**07000**	**03100**	**03800**	**01900**

MaxiLock-M – MTFN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

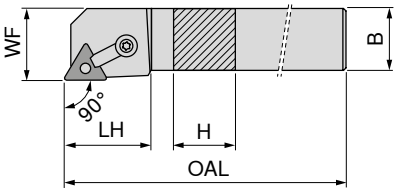
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 541 ...	Right-hand 78 540 ...
MTFN R/L 12-3B	0.750	0.750	4.500	1.000	1.000	TN..33..	**01223**[1)]	**01223**[1)]
MTFN R/L 16-3D	1.000	1.000	6.000	1.250	1.250	TN..33..	**01643**[1)]	**01643**[1)]
MTFN R/L 16-4D	1.000	1.000	6.000	1.250	1.250	TN..43..	**01644**[1)]	**01644**[1)]
MTFN R/L 20-4D	1.250	1.250	6.000	1.500	1.500	TN..43..	**02044**[1)]	**02044**[1)]
MTFN R/L 85-4D	1.250	1.000	6.000	1.250	1.250	TN..43..	**08544**[1)]	**08544**[1)]
MTFN R/L 86-4D	1.500	1.000	6.000	1.250	1.250	TN..43..	**08644**[1)]	**08644**[1)]

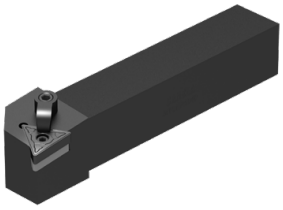
1) Not in stock

Spare parts for Article no.	Clamp 78 950 ...	Key I 78 950 ...	Dowel pin 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat T 78 950 ...
78 540 01223 / 78 541 01223	**00400**	**06800**	**02900**	**03800**	**01800**
78 540 01643 / 78 541 01643	**00400**	**06800**	**02900**	**03800**	**01800**
78 540 01644 / 78 541 01644	**00400**	**07000**	**03100**	**03800**	**01900**
78 540 02044 / 78 541 02044	**00400**	**07000**	**03100**	**03800**	**01900**
78 540 08544 / 78 541 08544	**00400**	**07000**	**03100**	**03800**	**01900**
78 540 08644 / 78 541 08644	**00400**	**07000**	**03100**	**03800**	**01900**

MaxiLock-M – MTGN 90° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

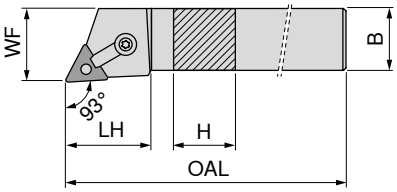
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 543 ...	Right-hand 78 542 ...
MTGN R/L 08-2A	0.500	0.500	4.000	0.875	0.625	TN..22..	**00812**[1)]	**00812**[1)]
MTGN R/L 10-3B	0.625	0.625	4.500	1.000	0.875	TN..33..	**01023**[1)]	**01023**[1)]
MTGN R/L 12-3B	0.750	0.750	4.500	1.060	1.000	TN..33..	**01223**[1)]	**01223**[1)]
MTGN R/L 16-3D	1.000	1.000	6.000	1.060	1.250	TN..33..	**01643**[1)]	**01643**[1)]
MTGN R/L 16-4D	1.000	1.000	6.000	1.220	1.250	TN..43..	**01644**[1)]	**01644**[1)]
MTGN R/L 20-4D	1.250	1.250	6.000	1.220	1.500	TN..43..	**02044**[1)]	**02044**[1)]
MTGN R/L 85-4D	1.250	1.000	6.000	1.220	1.250	TN..43..	**08544**[1)]	**08544**[1)]
MTGN R/L 86-4D	1.500	1.000	6.000	1.220	1.250	TN..43..	**08644**[1)]	**08644**[1)]

1) Not in stock

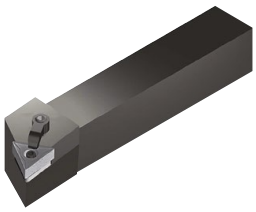
Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 542 00812 / 78 543 00812	**00700**	**07000**		**05000**	
78 542 01023 / 78 543 01023	**00400**	**06800**	**02900**	**03800**	**01800**
78 542 01223 / 78 543 01223	**00400**	**06800**	**02900**	**03800**	**01800**
78 542 01643 / 78 543 01643	**00400**	**06800**	**02900**	**03800**	**01800**
78 542 01644 / 78 543 01644	**00400**	**07000**	**03100**	**03800**	**01900**
78 542 02044 / 78 543 02044	**00400**	**07000**	**03100**	**03800**	**01900**
78 542 08544 / 78 543 08544	**00400**	**07000**	**03100**	**03800**	**01900**
78 542 08644 / 78 543 08644	**00400**	**07000**	**03100**	**03800**	**01900**

MaxiLock-M – MTJN 93° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



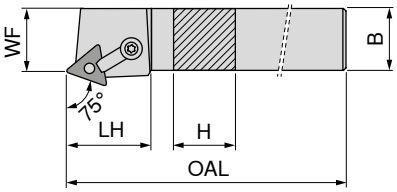
							Left-hand	Right-hand
							78 545 ...	**78 544 ...**
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert		
MTJN R/L 12-3B	0.750	0.750	4.500	1.030	1.000	TN..33..	**01223**[1)]	**01223**[1)]
MTJN R/L 16-3D	1.000	1.000	6.000	1.030	1.250	TN..33..	**01643**[1)]	**01643**[1)]
MTJN R/L 16-4D	1.000	1.000	6.000	1.250	1.250	TN..43..	**01644**[1)]	**01644**[1)]
MTJN R/L 20-4D	1.250	1.250	6.000	1.250	1.500	TN..43..	**02044**[1)]	**02044**[1)]

1) Not in stock

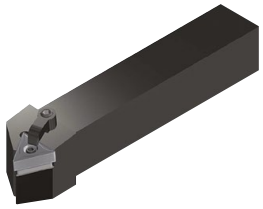
	 Clamp	 Key I	 Dowel pin	Clamping screw	 Solid Carbide Seat T
	78 950 ...	**78 950 ...**	**78 950 ...**	**78 950 ...**	**78 950 ...**
Spare parts for Article no.					
78 544 01223 / 78 545 01223	**00400**	**06800**	**02900**	**03800**	**01800**
78 544 01643 / 78 545 01643	**00400**	**06800**	**02900**	**03800**	**01800**
78 544 01644 / 78 545 01644	**00400**	**07000**	**03100**	**03800**	**01900**
78 544 02044 / 78 545 02044	**00400**	**07000**	**03100**	**03800**	**01900**

MaxiLock-M – MTRN 75° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 547 ...	Right-hand 78 546 ...
MTRN R/L 12-3B	0.750	0.750	4.500	1.160	0.855	TN..33..	**01223**[1)]	**01223**[1)]
MTRN R/L 16-3D	1.000	1.000	6.000	1.160	1.105	TN..33..	**01643**[1)]	**01643**[1)]
MTRN R/L 16-4D	1.000	1.000	6.000	1.380	1.048	TN..43..	**01644**[1)]	**01644**[1)]
MTRN R/L 20-4D	1.250	1.250	6.000	1.380	1.298	TN..43..	**02044**[1)]	**02044**[1)]

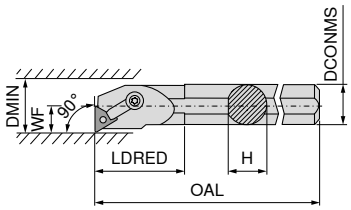
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 546 01223 / 78 547 01223	**00400**	**06800**	**02900**	**03800**	**01800**
78 546 01643 / 78 547 01643	**00400**	**06800**	**02900**	**03800**	**01800**
78 546 01644 / 78 547 01644	**00400**	**07000**	**03100**	**03800**	**01900**
78 546 02044 / 78 547 02044	**00400**	**07000**	**03100**	**03800**	**01900**

MaxiLock-M – MTFN 90° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 711 ...	Right-hand 78 710 ...
A16T MTFN R/L 3	1.000	0.900	12.000	2.500	0.640	1.280	TN..33..	**31616**	**31616**
S16T MTFN R/L 3	1.000	0.900	12.000	2.500	0.640	1.280	TN..33..	**31626**[1)]	**31626**[1)]
A20U MTFN R/L 3	1.250	1.180	14.000	3.000	0.765	1.530	TN..33..	**32020**[1)]	**32020**[1)]
S20U MTFN R/L 3	1.250	1.180	14.000	3.000	0.765	1.530	TN..33..	**32030**[1)]	**32030**[1)]
S24U MTFN R/L 3	1.500	1.370	14.000	3.000	0.890	1.780	TN..33..	**32434**[1)]	**32434**[1)]
S20U MTFN R/L 4	1.250	1.180	14.000	3.000	0.765	1.530	TN..43..	**42030**[1)]	**42030**[1)]
S24U MTFN R/L 4	1.500	1.370	14.000	3.000	0.890	1.780	TN..43..	**42434**[1)]	**42434**[1)]
A24U MTFN R/L 4	1.500	1.370	14.000	3.000	0.890	1.780	TN..43..	**42424**[1)]	**42424**[1)]
S28U MTFN R/L 4	1.750	1.630	14.000	4.000	1.015	2.030	TN..43..	**42838**[1)]	**42838**[1)]
A28U MTFN R/L 4	1.750	1.630	14.000	4.000	1.015	2.030	TN..43..	**42828**[1)]	**42828**[1)]
A32V MTFN L 4	2.000	1.870	16.000	4.000	1.281	2.562	TN..43..	**43233**[1)]	
S32V MTFN R/L 4	2.000	1.870	16.000	4.000	1.281	2.562	TN..43..	**43242**[1)]	**43242**[1)]
S40V MTFN R/L 4	2.500	2.380	16.000	4.000	1.531	3.062	TN..43..	**44050**[1)]	**44050**[1)]

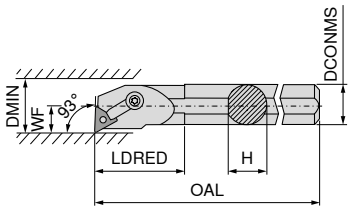
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...
78 710 31616 / 78 711 31616	**00400**	**06800**		**03700**	
78 710 31626 / 78 711 31626	**00400**	**06800**		**03700**	
78 710 32020 / 78 711 32020	**00400**	**06800**	**02900**	**03800**	**01800**
78 710 32030 / 78 711 32030	**00400**	**06800**	**02900**	**03800**	**01800**
78 710 32434 / 78 711 32434	**00400**	**06800**	**02900**	**03800**	**01800**
78 710 42030 / 78 711 42030	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 42434 / 78 711 42434	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 42424 / 78 711 42424	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 42838 / 78 711 42838	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 42828 / 78 711 42828	**00400**	**06900**	**03100**	**03800**	**01900**
78 711 43233	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 43242 / 78 711 43242	**00400**	**06900**	**03100**	**03800**	**01900**
78 710 44050 / 78 711 44050	**00400**	**06900**	**03100**	**03800**	**01900**

MaxiLock-M – MTUN 93° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

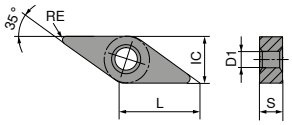
								Left-hand	Right-hand
								78 713 ...	**78 712 ...**
Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert		
S16T MTUN R/L 3	1.000	0.900	12.000	2.500	0.640	1.280	TN..33..	**31626**[1)]	**31626**[1)]
S24U MTUN R/L 4	1.500	1.370	14.000	3.000	0.890	1.780	TN..43..	**42434**[1)]	**42434**

1) Not in stock

	 Clamp	 Key I	 Dowel pin	 Clamping screw
	78 950 ...	**78 950 ...**	**78 950 ...**	**78 950 ...**
Spare parts for Article no.				
78 712 31626 / 78 713 31626	**00400**	**06800**		**03700**
78 712 42434 / 78 713 42434	**00400**	**06900**	**03100**	**03800**

VNMG

Designation	L inch	S inch	D1 inch	IC inch
VNMG 33..	0.6535	0.1874	0.150	0.3748



VNMG

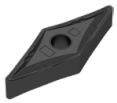
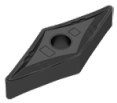
	NEW	NEW	NEW	NEW	NEW	NEW	NEW
	-F40 CTCP125-P	-F50 CTCP115-P	-F50 CTCP125-P	-F50 CTCP135-P	-XU CTCP115-P	-XU CTCP125-P	-M40 CTCP125-P
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F VNMG	F VNMG	F VNMG	F VNMG	M VNMG	M VNMG	M VNMG
	76 000 ...	76 156 ...	76 156 ...	76 156 ...	76 294 ...	76 294 ...	76 001 ...
ANSI / RE inch							
331EN 0.0157	51601	31601	51601	71601	31601	51601	51601
332EN 0.0315	51801	31801	51801	71801	31801	51801	51801
P	●	●	●	●	●	●	●
M				○			
K	○	○	○		○	○	○
N							
S							
H							
O							

VNMG

	NEW		NEW	NEW			
	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115-P	-M50 CTCP125-P	-F30 CTCM120	-F30 CTPM125	-F30 CTCM130
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	M VNMG	M VNMG	M VNMG	M VNMG	F VNMG	F VNMG	F VNMG
	70 190 ...	70 131 ...	76 131 ...	76 131 ...	75 022 ...	75 022 ...	75 022 ...
ANSI / RE inch							
331EN 0.0157			31601	51601	11600	216	31600
332EN 0.0315		518	31801	51801	11800	218	31800
333EN 0.0472	01200	520	32001	52001			
P	○	○	●	●	○	○	○
M					●	●	●
K	●	●	○	○			
N							
S							○
H							
O							

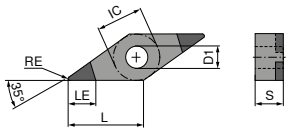
9

VNMG

	-M30 CTCM120	-M30 CTPM125	-M30 CTCM130	-M34 CTPX710
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	M	M	M	M
	VNMG	VNMG	VNMG	VNMG
	75 023 ...	75 023 ...	75 023 ...	75 009 ...
ANSI / RE inch				
331EN 0.0157				61600
332EN 0.0315	11800	218	31800	61800
333EN 0.0472				62000
P	○	○	○	●
M	●	●	●	●
K				
N				○
S			○	●
H				
O				

VNGA

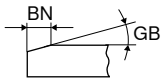
Designation	L inch	S inch	D1 inch	IC inch
VNGA 331E..	0.6535	0.1874	0.150	0.3748
VNGA 331S..	0.6535	0.1874	0.150	0.3748
VNGA 332E..	0.6535	0.1874	0.150	0.3748
VNGA 332S..	0.6535	0.1874	0.150	0.3748



VNGA B

VNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners

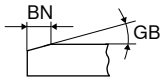


						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						F	F	F
						PCBN VNGA	PCBN VNGA	PCBN VNGA
						71 042 ...	71 042 ...	71 042 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
331EN	0.0157			**B (2)**	0.2008	**70002**	**80002**	
331SN	0.0157	0.0055	20°	**B (2)**	0.2008			**90002**
332EN	0.0315			**B (2)**	0.1654	**70302**	**80302**	
332SN	0.0315	0.0055	20°	**B (2)**	0.1654			**90302**
P								
M								
K								
N								
S								
H						●	●	●
O								

9

VNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners

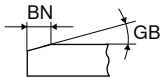


	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN VNGA	PCBN VNGA	PCBN VNGA
	71 042 ...	71 042 ...	71 042 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
331SN	0.0157	0.0035	15°	B (2)	0.2008	70102	80102	
331SN	0.0157	0.0071	25°	B (2)	0.2008			90102
332SN	0.0315	0.0035	15°	B (2)	0.1654	70402	80402	
332SN	0.0315	0.0071	25°	B (2)	0.1654			90402
P								
M								
K								
N								
S								
H						●	●	●
O								

VNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



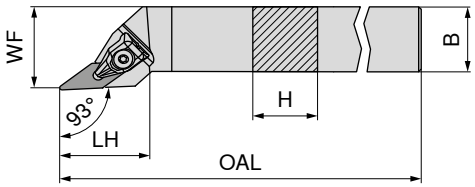
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN VNGA	PCBN VNGA	PCBN VNGA
	71 042 ...	71 042 ...	71 042 ...

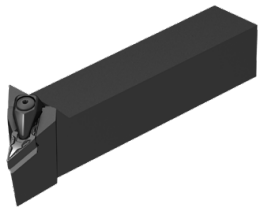
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
331SN	0.0157	0.0055	20°	B (2)	0.2008	70202	80202	
331SN	0.0157	0.0079	35°	B (2)	0.2008			90202
332SN	0.0315	0.0055	20°	B (2)	0.1654	70502	80502	
332SN	0.0315	0.0079	35°	B (2)	0.1654			90502
P								
M								
K								
N								
S								
H						●	●	●
O								

MaxiLock-D – DVJN 93° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 513 ...	Right-hand 78 512 ...
DVJN R/L 12-3BA-N	0.750	0.750	4.500	1.750	1.000	VN..33..	**01276**	**01276**
DVJN R/L 16-3DA-N	1.000	1.000	6.000	1.750	1.250	VN..33..	**01698**	**01698**
DVJN R/L 20-3DA-N	1.250	1.250	6.000	1.750	1.500	VN..33..	**02098**	**02098**
DVJN R/L 24-3EA-N	1.500	1.500	7.000	1.750	2.000	VN..33..	**02495**[1)]	**02495**[1)]

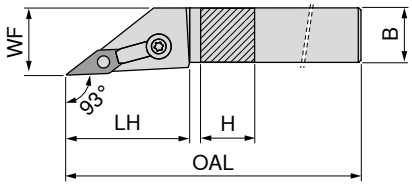
1) Not in stock

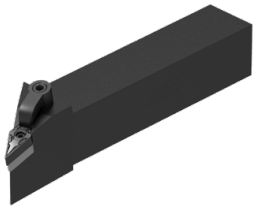
Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat V 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 512 02098 / 78 513 02098	**07500**	**08100**	**07900**	**02200**	**08400**	**08000**
78 512 02495 / 78 513 02495	**07500**	**08100**	**07900**	**02200**	**08400**	**08000**

9

MaxiLock-M – MVJN 93° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Illustrations show right-hand versions

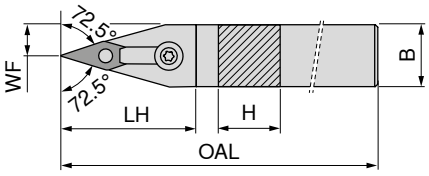
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 549 ...	Right-hand 78 548 ...
MVJN R/L 12-3B	0.750	0.750	4.500	1.620	1.000	VN..33..	**01223**[1)]	**01223**[1)]
MVJN R/L 16-3D	1.000	1.000	6.000	1.620	1.250	VN..33..	**01643**[1)]	**01643**[1)]
MVJN R/L 20-3D	1.250	1.250	6.000	1.620	1.500	VN..33..	**02043**[1)]	**02043**[1)]

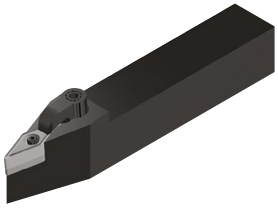
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat V 78 950 ...
78 548 01223 / 78 549 01223	**09000**	**06800**	**02900**	**03800**	**02200**
78 548 01643 / 78 549 01643	**09000**	**06800**	**02900**	**03800**	**02200**
78 548 02043 / 78 549 02043	**09000**	**06800**	**02900**	**03800**	**02200**

MaxiLock-M – MVVN 72.5° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key





Neutral

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	78 581 ...
MVVN N 12-3B	0.750	0.750	4.500	1.620	0.375	VN..33..	**01223**[1)]
MVVN N 16-3B	1.000	1.000	4.500	1.620	0.500	VN..33..	**01623**[1)]
MVVN N 20-3D	1.250	1.250	6.000	1.620	0.625	VN..33..	**02043**[1)]
MVVN N 24-3E	1.500	1.500	7.000	1.620	0.750	VN..33..	**02453**[1)]

1) Not in stock


Clamp


Key I


Dowel pin

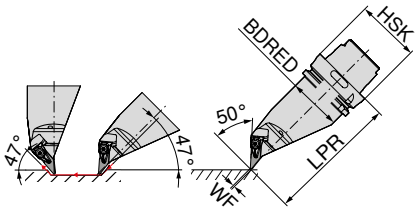

Clamping screw


Solid Carbide Seat V

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 581 01223	**09000**	**06800**	**02900**	**03800**	**02200**
78 581 01623	**09000**	**06800**	**02900**	**03800**	**02200**
78 581 02043	**09000**	**06800**	**02900**	**03800**	**02200**
78 581 02453	**09000**	**06800**	**02900**	**03800**	**02200**

MaxiLock-D – DVMN 50° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key



Left-hand

Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	74 525 ...
HSK T63 DVMN L 16	HSK-T 63	130	53	0	2	VN.. 1604	**516**
HSK T100 DVMN L 16	HSK-T 100	160	88	0	2	VN.. 1604	**716**


XPress type

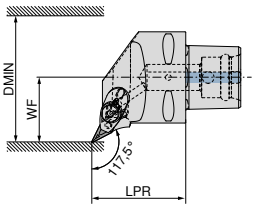

Screwdriver


Clamping screw


Solid Carbide Seat V

Spare parts	70 950 ...		80 950 ...		70 950 ...		70 950 ...
74 525 516 / 74 525 716	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**806**

MaxiLock-D – DVPN 117.5° – Toolholder with top clamping



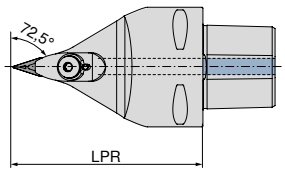
Illustrations show right-hand versions

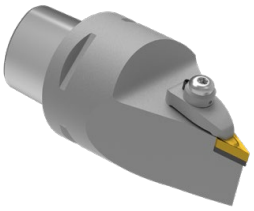
Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 84 673 ...	Right-hand 84 672 ...
PSC40 DVPN R/L 50050-16	PSC 40	50	27	50	10	VN.. 1604	**01695**	**01695**
PSC50 DVPN R/L 65060-16	PSC 50	60	35	65	10	VN.. 1604	**01694**	**01694**
PSC63 DVPN R/L 80065-16	PSC 63	65	45	80	10	VN.. 1604	**01693**	**01693**

Spare parts

		Clamping Screw 84 950 ...	Clamping claw 84 950 ...	Ring-shaped nozzle 84 950 ...	Clamping screw 84 950 ...	Solid Carbide Seat V 84 950 ...
84 672 01693 / 84 673 01695	M6X28 SW4	**28300**	**28500**	**28400**	**27600**	**28000**

MaxiLock-D – DVVN 72.5° – Toolholder with top clamping



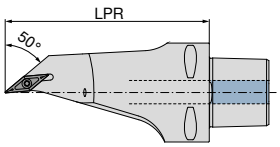


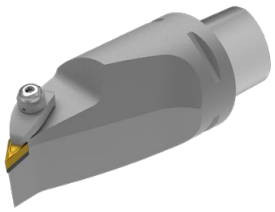
Designation	Adapter	LPR mm	torque moment Nm	Insert	Neutral 84 679 ...
PSC63 DVVN N 0100-16	PSC 63	100	10	VN.. 1604	**01693**
PSC63 DVVN N 0130-16	PSC 63	130	10	VN.. 1604	**11693**

Spare parts

		Clamping Screw 84 950 ...	Clamping claw 84 950 ...	Ring-shaped nozzle 84 950 ...	Clamping screw 84 950 ...	Solid Carbide Seat V 84 950 ...
84 679 01693 / 84 679 11693	M6X28 SW4	**28300**	**28500**	**28400**	**27600**	**28000**

MaxiLock-D – DVMN 50° – Toolholder with top clamping





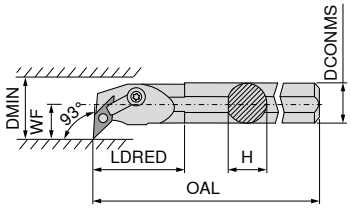
Designation	Adapter	LPR mm	torque moment Nm	Insert	Neutral 84 682 ...
PSC63 DVMN L 0130-16	PSC 63	130	10	VN.. 1604	**01693**

Spare parts		Clamping Screw 84 950 ...	Ring-shaped nozzle 84 950 ...	Clamping screw 84 950 ...	Solid Carbide Seat V 84 950 ...
84 682 01693	M6X28 SW4	**28300**	**28400**	**27600**	**28000**

MaxiLock-M – MVUN 93° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

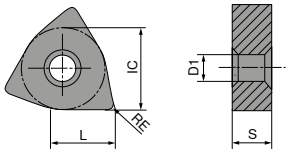
Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 715 ...	Right-hand 78 714 ...
A16T MVUN R/L 3	1.000	0.900	12.000	2.500	1.000	2.000	VN..33..	**31616**	**31616**
S16T MVUN R/L 3	1.000	0.900	12.000	2.500	1.000	2.000	VN..33..	**31626**[1)]	**31626**[1)]
A20U MVUN R/L 3	1.250	1.180	14.000	3.000	1.125	2.250	VN..33..	**32020**[1)]	**32020**[1)]
S20U MVUN R/L 3	1.250	1.180	14.000	3.000	1.125	2.250	VN..33..	**32030**[1)]	**32030**[1)]
S24U MVUN R/L 3	1.500	1.370	14.000	3.000	1.250	2.500	VN..33..	**32434**[1)]	**32434**[1)]
A24U MVUN R/L 3	1.500	1.370	14.000	3.000	1.250	2.500	VN..33..	**32424**[1)]	**32424**[1)]

1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat V 78 950 ...
78 714 31616 / 78 715 31616	**09000**	**06800**	**02900**	**03700**	**02200**
78 714 31626 / 78 715 31626	**09000**	**06800**	**02900**	**03700**	**02200**
78 714 32020 / 78 715 32020	**09000**	**06800**	**02900**	**03800**	**02200**
78 714 32030 / 78 715 32030	**09000**	**06800**	**02900**	**03800**	**02200**
78 714 32434 / 78 715 32434	**09000**	**06800**	**02900**	**03800**	**02200**
78 714 32424 / 78 715 32424	**09000**	**06800**	**02900**	**03800**	**02200**

WNMG / WNMA

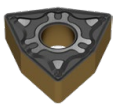
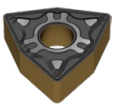
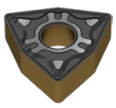
Designation	L inch	S inch	D1 inch	IC inch
WNMG 33..	0.2559	0.1874	0.1500	0.3748
WNM. 43..	0.3386	0.1874	0.2032	0.5000



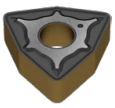
WNMG

		NEW	NEW	NEW	NEW	NEW
		-CF20 CTEP110	-TFQ CTEP110	-F50 CTCP115-P	-F50 CTCP125-P	-F50 CTCP135-P	-TFQ CTCP115-P	-TFQ CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		F	F	F	F	F	F	F
		CERMET WNMG	CERMET WNMG	WNMG	WNMG	WNMG	WNMG	WNMG
		76 171 ...	76 177 ...	76 157 ...	76 157 ...	76 157 ...	76 177 ...	76 177 ...
ANSI	RE inch							
331EN	0.0157	004		30401	50401	70401	30401	51401
332EN	0.0315	006	006	30601	50601	70601	30601	50601
431EN	0.0157		016	31601	51601	71601		
432EN	0.0315	018	018	31801	51801	71801	31801	51801
433EN	0.0472			32001	52001	72001	32001	52001
P		●	●	●	●	●	●	●
M		○	○			○		
K		○	○	○	○		○	○
N								
S								
H								
O								

WNMG

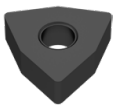
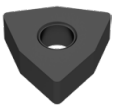
		NEW	NEW			NEW	NEW	NEW
		-XU CTCP115-P	-XU CTCP125-P	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115-P	-M50 CTCP125-P	-M50 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	M
		WNMG	WNMG	WNMG	WNMG	WNMG	WNMG	WNMG
		76 295 ...	76 295 ...	70 139 ...	70 139 ...	76 139 ...	76 139 ...	76 139 ...
ANSI	RE inch							
331EN	0.0157					30401	50401	70401
332EN	0.0315					30601	50601	70601
333EN	0.0472					30801	50801	70801
431EN	0.0157	31601	51601			31601	51601	71601
432EN	0.0315	31801	51801	018	518	31801	51801	71801
433EN	0.0472	32001	52001	020	520	32001	52001	72001
434EN	0.0630					32201	52201	72201
P		●	●	○	○	●	●	●
M								○
K		○	○	●	●	○	○	
N								
S								
H								
O								

WNMG

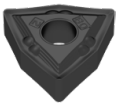
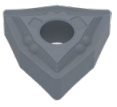
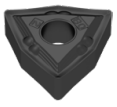
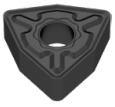
		NEW	NEW			NEW	NEW	NEW
		-TMQ CTCP115-P	-TMQ CTCP125-P	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115-P	-M70 CTCP125-P	-M70 CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	M
		WNMG	WNMG	WNMG	WNMG	WNMG	WNMG	WNMG
		76 198 ...	76 198 ...	70 273 ...	70 273 ...	76 273 ...	76 273 ...	76 273 ...
ANSI	RE inch							
332EN	0.0315					30601	50601	70601
333EN	0.0472					30801	50801	70801
432EN	0.0315	31801	51801	018	518	31801	51801	71801
433EN	0.0472	32001	52001	020	520	32001	52001	72001
433EN	0.0630						52201	
434EN	0.0630			022	522	32201		72201
P		●	●	○	○	●	●	●
M								○
K		○	○	●	●	○	○	
N								
S								
H								
O								

9

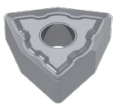
WNMA / WNMG

		CTCK110	CTCK120	-F30 CTCM120	-F30 CTPM125	-F30 CTCM130
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
						
		R	R	F	F	F
		WNMA	WNMA	WNMG	WNMG	WNMG
		70 169 ...	70 169 ...	75 024 ...	75 024 ...	75 024 ...
ANSI	RE inch					
331EN	0.0157			10400	204	30400
332EN	0.0315			10600	206	30600
431EN	0.0157			11600	216	31600
432EN	0.0315	018	518	11800	218	31800
433EN	0.0472	020	520			
434EN	0.0630	022	522			
P		○	○	○	○	○
M				●	●	●
K		●	●			
N						
S						○
H						
O						

WNMG

			-M30 CTCM120	-M30 CTPM125	-M30 CTCM130	NEW -M42 CTCM130	-M60 CTCM120	-M60 CTPM125	-M60 CTCM130
			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
									
			M	M	M	M	M	M	M
			WNMG	WNMG	WNMG	WNMG	WNMG	WNMG	WNMG
			75 025 ...	75 025 ...	75 025 ...	75 036 ...	75 026 ...	75 026 ...	75 026 ...
ANSI	RE inch								
331EN	0.0157					30400			
332EN	0.0315	10600	206	30600	30600	10600	206	30600	
333EN	0.0472	10800	208	30800		10800	208	30800	
431EN	0.0157				31600				
432EN	0.0315	11800	218	31800	31800	11800	218	31800	
433EN	0.0472	12000	220	32000	32000	12000	220	32000	
P		○	○	○	○	○	○	○	
M		●	●	●	●	●	●	●	
K									
N									
S				○	○			○	
H									
O									

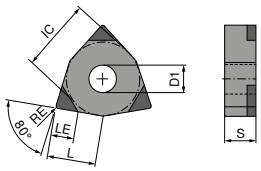
WNMG

		NEW	NEW	
		-M70 CTCM130	-F34 CTPX710	-M34 CTPX710
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
		M	F	M
		WNMG	WNMG	WNMG
		75 041 ...	75 313 ...	75 008 ...
ANSI	RE inch			
332EN	0.0315	30600		
432EN	0.0315	31800	61800	61800
433EN	0.0472	32000		62000
P		○	●	●
M		●	●	●
K				
N			○	○
S		○	●	●
H				
O				

9

WNGA

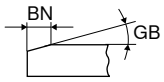
Designation	L inch	S inch	D1 inch	IC inch
WNGA 432E..	0.3346	0.1874	0.202	0.500
WNGA 432S..	0.3346	0.1874	0.202	0.500
WNGA 433E..	0.3346	0.1874	0.202	0.500
WNGA 433S..	0.3346	0.1874	0.202	0.500



WNGA C

WNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



NEW NEW NEW

CTBH1000C | CTBH2000C | CTBH3000C

F F F

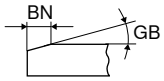
PCBN WNGA PCBN WNGA PCBN WNGA

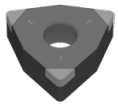
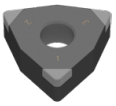
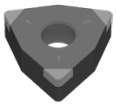
71 044 ... 71 044 ... 71 044 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
432EN	0.0315			**C (3)**	0.1299	**70002**	**80002**	
432SN	0.0315	0.0055	20°	**C (3)**	0.1299			**90002**
433EN	0.0472			**C (3)**	0.1220	**70302**	**80302**	
433SN	0.0472	0.0055	20°	**C (3)**	0.1220			**90302**
P								
M								
K								
N								
S								
H						●	●	●
O								

WNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



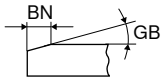
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	M	M	M
	PCBN WNGA	PCBN WNGA	PCBN WNGA
	71 044 ...	71 044 ...	71 044 ...

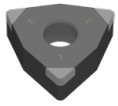
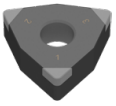
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
432SN	0.0315	0.0035	15°	C (3)	0.1299	70102	80102	
432SN	0.0315	0.0071	25°	C (3)	0.1299			90102
433SN	0.0472	0.0035	15°	C (3)	0.1220	70402	80402	
433SN	0.0472	0.0071	25°	C (3)	0.1220			90402
P								
M								
K								
N								
S								
H						●	●	●
O								

9

WNGA

▲ TCE(NOI) = Design and number of equipped cutting edge corners



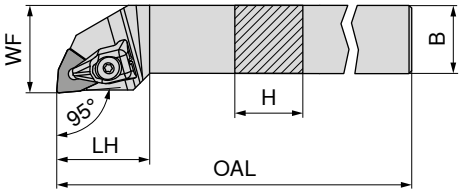
	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	R	R	R
	PCBN WNGA	PCBN WNGA	PCBN WNGA
	71 044 ...	71 044 ...	71 044 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch			
432SN	0.0315	0.0055	20°	C (3)	0.1299	70202	80202	
432SN	0.0315	0.0079	35°	C (3)	0.1299			90202
433SN	0.0472	0.0055	20°	C (3)	0.1220	70502	80502	
433SN	0.0472	0.0079	35°	C (3)	0.1220			90502
P								
M								
K								
N								
S								
H						●	●	●
O								

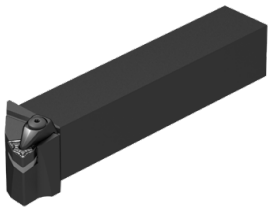
MaxiLock-D – DWLN 95° – Toolholder with top clamping

▲ ...A-N = with thru coolant
▲ ...N = without thru' coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



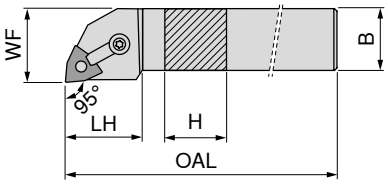
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 515 ...	Right-hand 78 514 ...
DWLN R 12-4BA-N	0.750	0.750	4.500	1.250	1.000	WN..43..		**01294**
DWLN R/L 12-4B-N	0.750	0.750	4.500	1.250	1.000	WN..43..	**01293**	**01293**
DWLN L 12-4BA-N	0.750	0.750		1.250	1.000	WN..43..	**01294**	
DWLN R/L 16-4DA-N	1.000	1.000	6.000	1.250	1.250	WN..43..	**01690**	**01690**
DWLN R/L 16-4D-N	1.000	1.000	6.000	1.250	1.250	WN..43..	**01689**	**01689**
DWLN R/L 20-4DA-N	1.250	1.250	6.000	1.250	1.500	WN..43..	**02092**	**02091**
DWLN R/L 20-4D-N	1.250	1.250	6.000	1.250	1.500	WN..43..	**02089**	**02089**
DWLN R/L 24-4E-N	1.500	1.500	7.000	1.250	2.000	WN..43..	**02486**[1)]	**02486**[1)]
DWLN R/L 24-4EA-N	1.500	1.500	7.000	1.250	2.000	WN..43..	**02488**[1)]	**02488**[1)]

1) Not in stock

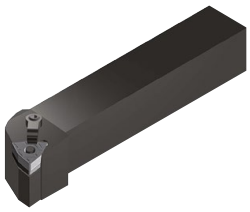
Spare parts for Article no.	 Clamping claw 78 950 ...	 Key I 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat W 78 950 ...	 Threaded bush 78 950 ...	 Spring 78 950 ...
78 514 01293 / 78 515 01293	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**
78 514 01689 / 78 515 01689	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**
78 514 02091 / 78 515 02092	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**
78 514 02089 / 78 515 02089	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**
78 514 02486 / 78 515 02486	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**
78 514 02488 / 78 515 02488	**07600**	**08100**	**08300**	**02400**	**08500**	**04900**

MaxiLock-M – MWLN 95° – Toolholder with top clamping

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 551 ...	Right-hand 78 550 ...
MWLN L 12-3B	0.750	0.750	4.500	1.000	1.000	WN..33..	**01223**[1)]	**01223**[1)]
MWLN R/L 16-3D	1.000	1.000	6.000	1.000	1.250	WN..33..	**01643**[1)]	**01643**[1)]
MWLN R/L 12-4B	0.750	0.750	4.500	1.070	1.000	WN..43..	**01224**[1)]	**01224**[1)]
MWLN R/L 16-4D	1.000	1.000	6.000	1.070	1.250	WN..43..	**01644**[1)]	**01644**[1)]
MWLN R/L 20-4D	1.250	1.250	6.000	1.070	1.500	WN..43..	**02044**[1)]	**02044**[1)]
MWLN R/L 24-4E	1.500	1.500	7.000	1.070	2.000	WN..43..	**02454**[1)]	**02454**[1)]

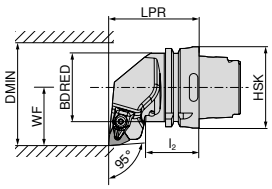
1) Not in stock

Spare parts for Article no.	 Clamp 78 950 ...	 Key I 78 950 ...	 Dowel pin 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat W 78 950 ...	 Solid Carbide Seat V 78 950 ...
78 551 01223	**00600**	**06800**	**02900**	**03600**		**02200**
78 550 01643 / 78 551 01643	**00600**	**06800**	**02900**	**03600**		**02200**
78 550 01224 / 78 551 01224	**00400**	**07000**	**03100**	**03800**		
78 550 01644	**00400**	**07000**	**03100**	**03800**	**02400**	
78 551 01644	**00400**	**07000**	**03100**	**03800**		
78 550 02044 / 78 551 02044	**00400**	**07000**	**03100**	**03800**		
78 550 02454 / 78 551 02454	**00400**	**07000**	**03100**	**03800**		

9

MaxiLock-D – DWLN 95° – Toolholder with top clamping

Scope of supply:
Tool holder with Torx key



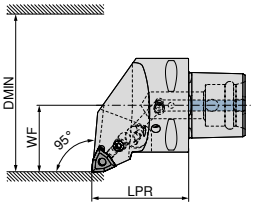
Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	Insert	Left-hand 74 529 ...	Right-hand 74 528 ...
HSK T63 DWLN R/L 08	HSK-T 63	70	42.00	52.6	45	125	WN.. 0804	**508**	**508**
HSK T100 DWLN R 08	HSK-T 100	80	45.00	87.6	55	125	WN.. 0804		**708**
HSK T100 DWLN L 08	HSK-T 100	80	53.96	87.6	55	125	WN.. 0804	**708**	

Spare parts	 XPress type 70 950 ...	 Screwdriver 80 950 ...		 Clamping screw 70 950 ...	 Solid Carbide Seat W 70 950 ...
74 528 508 / 74 529 708	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**	**812**

MaxiLock-N – PWLN 95° – Toolholder with lever clamping

Scope of supply:
without high-performance coolant set



Illustrations show right-hand versions

Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 653 ...	Right-hand 84 652 ...
PSC40 PWLN R/L 50050-08	PSC 40	50	27	50	5	WN.. 0804	DC	**00895**	**00895**
PSC50 PWLN R/L 65060-08	PSC 50	60	35	65	5	WN.. 0804	DC	**00894**	**00894**
PSC63 PWLN R/L 80065-08	PSC 63	65	45	80	5	WN.. 0804	DC	**00893**	**00893**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

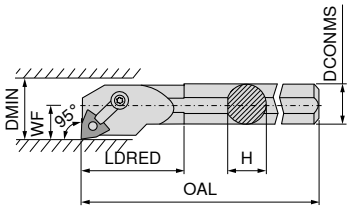
Spare parts

	Shim 84 950 ...		Elbow lever screw 84 950 ...	Lever 84 950 ...	Solid Carbide Seat W 84 950 ...
84 652 00893 / 84 653 00895	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27700**

MaxiLock-M – MWLN 95° – Boring bar with top clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with allen key



Illustrations show right-hand versions

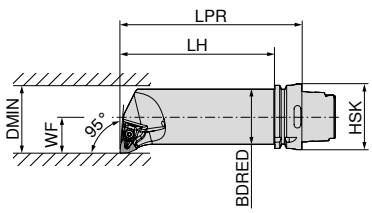
Designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	Insert	Left-hand 78 717 ...	Right-hand 78 716 ...
S16T MWLN R/L 4	25.40	22.860	304.8	63.5	16.256	32.512	WN..43..	**41626**[1)]	**41626**[1)]
A16T MWLN R/L 4	25.40	22.860	304.8	63.5	16.256	32.512	WN..43..	**41616**	**41616**
S20U MWLN R/L 4	31.75	29.972	355.6	76.2	19.431	38.862	WN..43..	**42030**[1)]	**42030**[1)]
A20U MWLN R/L 4	31.75	29.972	355.6	76.2	19.431	38.862	WN..43..	**42020**[1)]	**42020**[1)]
S24U MWLN R/L 4	38.10	34.798	355.6	76.2	22.606	45.212	WN..43..	**42434**[1)]	**42434**[1)]
A24U MWLN R/L 4	38.10	34.798	355.6	76.2	22.606	45.212	WN..43..	**42424**[1)]	**42424**[1)]

1) Not in stock

Spare parts for Article no.	Clamp 78 950 ...	Key I 78 950 ...	Dowel pin 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat W 78 950 ...
78 716 41626 / 78 717 41626	**00400**	**06900**	**03000**	**03700**	
78 716 41616 / 78 717 41616	**00400**	**06900**	**03000**	**03700**	
78 716 42030 / 78 717 42030	**00400**	**06900**	**03100**	**03800**	**02400**
78 716 42020 / 78 717 42020	**00400**	**06900**	**03100**	**03800**	**02400**
78 716 42434 / 78 717 42434	**00400**	**06900**	**03100**	**03800**	**02400**
78 716 42424 / 78 717 42424	**00400**	**06900**	**03100**	**03800**	**02400**

MaxiLock-D – DWLN 95° – Boring bar with top clamping

Scope of supply:
Boring bar with Torx key



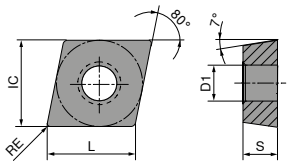
Illustrations show right-hand versions

Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 537 ...	Right-hand 74 536 ...
HSK T63 50Q DWLN R/L 08	HSK-T 63	175	149	50	35	63	4	WN.. 0804	**508**	**508**

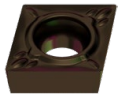
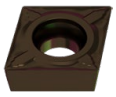
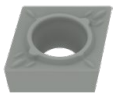
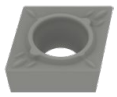
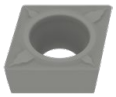
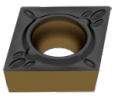
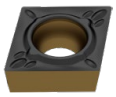
Spare parts	XPress type 70 950 ...		Screwdriver 80 950 ...		Clamping screw 70 950 ...		Solid Carbide Seat W 70 950 ...	
74 536 508 / 74 537 508	**824**	T15 - IP	**128**	M4.5x12 - IP	**820**		**812**	

CCGT / CCMT / CCET

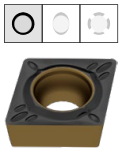
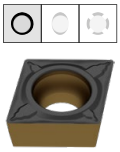
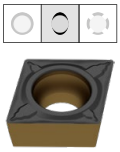
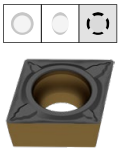
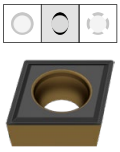
Designation	L inch	S inch	D1 inch	IC inch
CC.T 21..	0.2520	0.0937	0.1102	0.2500
CC.T 32..	0.3819	0.1563	0.1732	0.3748
CC.T 43..	0.5079	0.1874	0.2165	0.5000



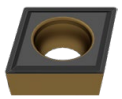
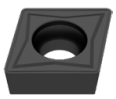
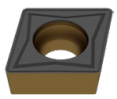
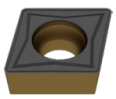
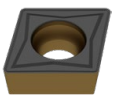
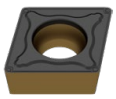
CCGT / CCMT

		-CF05 CTEP110	-CF55 CTEP110	-SF TCM407	-SF TCM10	-SMF TCM10	NEW -SF CTCP125-P	NEW -SF CTCP135-P
		DRAGONSKIN	DRAGONSKIN				DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	F	F
		CERMET CCGT	CERMET CCMT	CERMET CCGT	CERMET CCGT	CERMET CCMT	CCGT	CCGT
		76 247 ...	76 248 ...	70 251 ...	70 251 ...	70 249 ...	76 251 ...	76 251 ...
ANSI	RE inch							
21.5.5EN	0.0079	002		850	900		50201	70201
21.51EN	0.0157	004	004	852	902	900		
32.5.5EN	0.0079	014		854	904			
32.51EN	0.0157	016	016		906	904		
32.52EN	0.0315	018	018		908	906		
431EN	0.0157		028		910			
P		●	●	●	●	●	●	●
M		○	○	○	○	○		○
K		○	○	○	○	○	○	
N								
S								
H								
O								

CCMT / CCGT

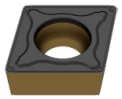
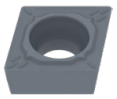
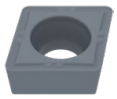
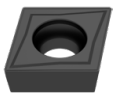
		NEW	NEW	NEW	NEW	NEW	NEW	NEW
		-SF CTCP115-P	-SF CTCP125-P	-SF CTCP135-P	-SMF CTCP115-P	-SMF CTCP125-P	-SMF CTCP135-P	-SM CTCP125-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	F	M
		CCMT	CCMT	CCMT	CCMT	CCMT	CCMT	CCGT
		76 253 ...	76 253 ...	76 253 ...	76 249 ...	76 249 ...	76 249 ...	76 250 ...
ANSI	RE inch							
21.5.5EN	0.0079							50201
21.51EN	0.0157	30401	50401	70401		50401	70401	
21.52EN	0.0315					50601		
32.51EN	0.0157	31601	51601	71601	31601	51601	71601	
32.52EN	0.0315	31801	51801		31801	51801		
431EN	0.0157		52801			52801		
432EN	0.0315		53001		33001		73001	
P		●	●	●	●	●	●	●
M				○			○	
K		○	○		○	○		○
N								
S								
H								
O								

CCGT / CCMT

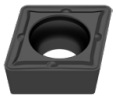
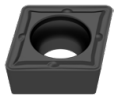
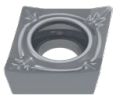
		NEW			NEW	NEW	NEW	NEW
		-SM CTCP135-P	-SM CTCK110	-SM CTCK120	-SM CTCP115-P	-SM CTCP125-P	-SM CTCP135-P	-SMQ CTCP115-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	F
		CCGT	CCMT	CCMT	CCMT	CCMT	CCMT	CCMT
		76 250 ...	70 252 ...	70 252 ...	76 252 ...	76 252 ...	76 252 ...	76 194 ...
ANSI	RE inch							
21.5.5EN	0.0079	70201						
21.51EN	0.0157		004	554	30401	50401	70401	
21.52EN	0.0315		006	506	30601		70601	
32.51EN	0.0157		016	516	31601	51601	71601	31601
32.52EN	0.0315		018	518	31801	51801	71801	31801
32.53EN	0.0472		020	520				
431EN	0.0157		028	528	32801	52801	72801	32801
432EN	0.0315		030	530	33001	53001	73001	33001
433EN	0.0472					53201		
P		●	○	○	●	●	●	●
M		○					○	
K			●	●	○	○		○
N								
S								
H								
O								

9

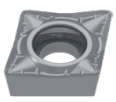
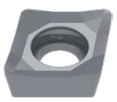
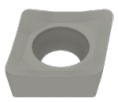
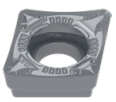
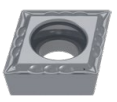
CCMT

		NEW		NEW		NEW		NEW
		-SMQ CTCP125-P	-M25 CTCM120	-SF CTPM125	-M25 CTPM125	-F43 CTCM130	-M25 CTCM130	-SM CTCM130
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	F	M
		CCMT	CCMT	CCMT	CCMT	CCMT	CCMT	CCMT
		76 194 ...	75 210 ...	75 042 ...	75 210 ...	75 031 ...	75 210 ...	75 047 ...
ANSI	RE inch							
21.51EN	0.0157		10400	20400	204		30400	30400
32.51EN	0.0157	51601	11600	21600	216	31600	31600	31600
32.52EN	0.0315	51801	11800		218	31800	31800	31800
431EN	0.0157	52801						32800
432EN	0.0315	53001						33000
P		●	○	○	○	○	○	○
M			●	●	●	●	●	●
K		○						
N								
S						○	○	○
H								
O								

CCMT / CCGT

		-M55 CTCM120	-M55 CTPM125	-M55 CTCM130	-23P H216T	-25P H210T	-25P CTPX710
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN			DRAGONSKIN
							
		M	M	M	F	F	M
		CCMT	CCMT	CCMT	CCGT	CCGT	CCGT
		75 211 ...	75 211 ...	75 211 ...	70 255 ...	70 248 ...	70 248 ...
ANSI	RE inch						
21.5.5FN	0.0079				652	636	70200
21.51EN	0.0157	10400	204	30400			
21.51FN	0.0157				654	638	70400
32.5.5FN	0.0079					639	71400
32.51EN	0.0157	11600	216	31600			
32.51FN	0.0157				656	640	71600
32.52EN	0.0315	11800	218	31800			
32.52FN	0.0315				658	641	71800
43.5FN	0.0079					643	
431EN	0.0157	12800	228	32800			
431FN	0.0157					642	72800
432EN	0.0315	13000	230	33000			
432FN	0.0315					644	73000
P		○	○	○			●
M		●	●	●			●
K					○	○	
N					●	●	●
S				○		○	●
H							
O					○	○	

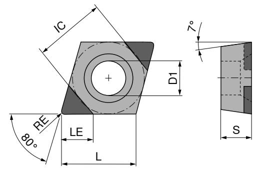
CCGT / CCMT / CCET

		-25Q H210T	-25Q CTPX710	-27 CTPX715	-27 H10T	-29 H216T	NEW -29 CTPX715	NEW -F05 CTPX710
			DRAGONSKIN	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	F
		CCGT	CCGT	CCGT	CCGT	CCMT	CCMT	CCET
		70 248 ...	70 248 ...	70 254 ...	70 254 ...	70 245 ...	70 245 ...	76 243 ...
ANSI	RE inch							
21.5.5FN	0.0079			80200	600			10200
21.50FN	0.0039							10100
21.51EN	0.0157					60400	70400	
21.51FN	0.0157	678	75400	80400	602			10400
32.5.5FN	0.0079			81400	604			
32.51EN	0.0157					61600	71600	
32.51FN	0.0157	680	76600	81600	606			
32.52EN	0.0315					61800	71800	
32.52FN	0.0315	681	76800	81800	608			
32.54FN	0.0630			72200				
43.5FN	0.0079			82600	610			
431FN	0.0157	682	77800	82800	612			
432FN	0.0315	686	78000	83000	614			
P			●	●			●	●
M			●	●			●	●
K		○		○	○	○	○	
N		●	●	●	●	●	●	●
S		○	●	●			●	●
H								
O		○		○	○	○	○	

9

CCGW

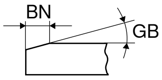
Designation	L inch	S inch	D1 inch	IC inch
CCGW 21.5..	0.2539	0.0937	0.1102	0.2500
CCGW 32.5..	0.3819	0.1563	0.1732	0.3748

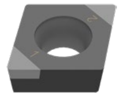
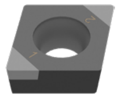
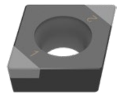


CCGW B

CCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners



	NEW	NEW	NEW
	CTBH1000C	CTBH2000C	CTBH3000C
			
	F	F	F
	PCBN	PCBN	PCBN
	CCGW	CCGW	CCGW
	71 000 ...	71 000 ...	71 000 ...

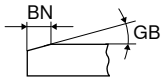
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch	CTBH1000C	CTBH2000C	CTBH3000C
21.5.5EN	0.0079			B (2)	0.1142	70002	80002	
21.5.5SN	0.0079	0.0055	20°	B (2)	0.1142			90002
21.51EN	0.0157			B (2)	0.1142	70302	80302	
21.51SN	0.0157	0.0055	20°	B (2)	0.1142			90302
32.5.5EN	0.0079			B (2)	0.1299	70602	80602	
32.5.5SN	0.0079	0.0055	20°	B (2)	0.1299			90602
32.51EN	0.0157			B (2)	0.1299	70902	80902	
32.51SN	0.0157	0.0055	20°	B (2)	0.1299			90902
32.52EN	0.0315			B (2)	0.1299	71202	81202	
32.52SN	0.0315	0.0055	20°	B (2)	0.1299			91202

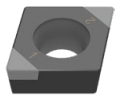
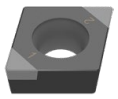
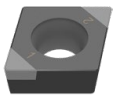
	CTBH1000C	CTBH2000C	CTBH3000C
P			
M			
K			
N			
S			
H	●	●	●
O			

→ v_c Page 196–199

CCGW

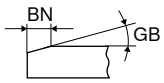
▲ TCE(NOI) = Design and number of equipped cutting edge corners

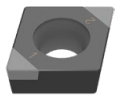
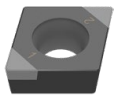
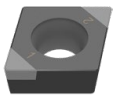


						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						M	M	M
						PCBN CCGW	PCBN CCGW	PCBN CCGW
						71 000 ...	71 000 ...	71 000 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.5.5SN	0.0079	0.0035	15°	**B (2)**	0.1142	**70102**	**80102**	
21.5.5SN	0.0079	0.0071	25°	**B (2)**	0.1142			**90102**
21.51SN	0.0157	0.0035	15°	**B (2)**	0.1142	**70402**	**80402**	
21.51SN	0.0157	0.0071	25°	**B (2)**	0.1142			**90402**
32.5.5SN	0.0079	0.0035	15°	**B (2)**	0.1299	**70702**	**80702**	
32.5.5SN	0.0079	0.0071	25°	**B (2)**	0.1299			**90702**
32.51SN	0.0157	0.0035	15°	**B (2)**	0.1299	**71002**	**81002**	
32.51SN	0.0157	0.0071	25°	**B (2)**	0.1299			**91002**
32.52SN	0.0315	0.0035	15°	**B (2)**	0.1299	**71302**	**81302**	
32.52SN	0.0315	0.0071	25°	**B (2)**	0.1299			**91302**
P								
M								
K								
N								
S								
H						●	●	●
O								

CCGW

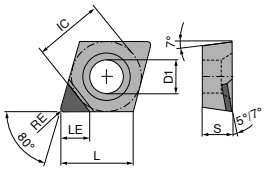
▲ TCE(NOI) = Design and number of equipped cutting edge corners



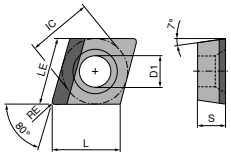
						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						R	R	R
						PCBN CCGW	PCBN CCGW	PCBN CCGW
						71 000 ...	71 000 ...	71 000 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1142	**70202**	**80202**	
21.5.5SN	0.0079	0.0079	35°	**B (2)**	0.1142			**90202**
21.51SN	0.0157	0.0055	20°	**B (2)**	0.1142	**70502**	**80502**	
21.51SN	0.0157	0.0079	35°	**B (2)**	0.1142			**90502**
32.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1299	**70802**	**80802**	
32.5.5SN	0.0079	0.0079	35°	**B (2)**	0.1299			**90802**
32.51SN	0.0157	0.0055	20°	**B (2)**	0.1299	**71102**	**81102**	
32.51SN	0.0157	0.0079	35°	**B (2)**	0.1299			**91102**
32.52SN	0.0315	0.0055	20°	**B (2)**	0.1299	**71402**	**81402**	
32.52SN	0.0315	0.0079	35°	**B (2)**	0.1299			**91402**
P								
M								
K								
N								
S								
H						●	●	●
O								

CCGW / CCGT

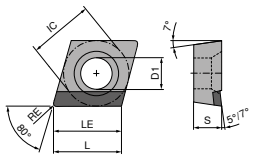
Designation	L inch	S inch	D1 inch	IC inch
CCG. 21..	0.2520	0.0937	0.1102	0.2500
CCG. 32..	0.3819	0.1563	0.1732	0.3748
CCG. 43..	0.5079	0.1874	0.2165	0.5000



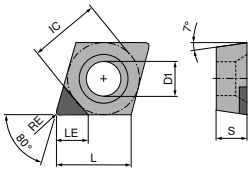
CCGT A



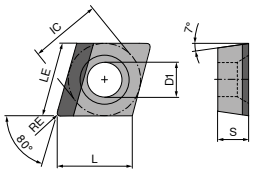
CCGT A LL



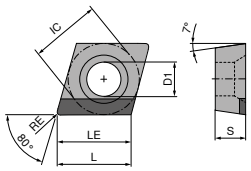
CCGT A RR



CCGW A



CCGW A LL



CCGW A RR

CCGW / CCGT

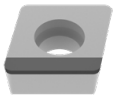
▲ TCE(NOI) = Design and number of equipped cutting edge corners

ANSI	RE inch	TCE (NOI)	LE inch	CTDMD05	CTDPD20	CTDPD20	-Q CTDPD20	-Q CTDPD20
				F	F	F	F	F
				DIAMOND CCGW	DIAMOND CCGW	DIAMOND CCGT	DIAMOND CCGW	DIAMOND CCGT
				71 120 ...	71 120 ...	71 124 ...	71 125 ...	71 126 ...
21.50FN	0.0039	A (1)	0.1339					101
21.50FN	0.0039	A (1)	0.1378			10100		
21.5.5FN	0.0079	A (1)	0.0984	050				
21.5.5FN	0.0079	A (1)	0.1299				102	102
21.5.5FN	0.0079	A (1)	0.1339		100	100		
21.51FN	0.0157	A (1)	0.0984	052				
21.51FN	0.0157	A (1)	0.1220					104
21.51FN	0.0157	A (1)	0.1260		102	102	104	
21.52FN	0.0315	A (1)	0.0984	05300				
21.52FN	0.0315	A (1)	0.1181		10300	10300		
32.50FN	0.0039	A (1)	0.1772				111	111
32.5.5FN	0.0079	A (1)	0.1732				112	112
32.5.5FN	0.0079	A (1)	0.1772		10500	10500		
32.51FN	0.0157	A (1)	0.0984	054				
32.51FN	0.0157	A (1)	0.1654				114	114
32.51FN	0.0157	A (1)	0.1693		104	104		
32.52FN	0.0315	A (1)	0.0984	056				
32.52FN	0.0315	A (1)	0.1614		106	106		
43.5FN	0.0079	A (1)	0.1732				122	122
431FN	0.0157	A (1)	0.1654				124	124
431FN	0.0157	A (1)	0.1693		108	108		
432FN	0.0315	A (1)	0.1614		110	110		
P								
M								
K								
N				●	●	●	●	●
S								
H								
O				●	●	●	●	●

9

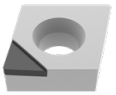
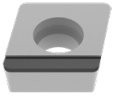
CCGW / CCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPD20	CTDPD20	-CB1 CTDPD20	-CB2 CTDPD20	-CB1 CTDPD20	-Q-CB2 CTDPD20
									
				F	F	F	M	F	M
				DIAMOND CCGW	DIAMOND CCGW	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT
				71 172 ...	71 172 ...	71 300 ...	71 168 ...	71 305 ...	71 169 ...
ANSI	RE inch	TCE (NOI)	LE inch						
21.5.5FN	0.0079	A (1)	0.1339			102			
21.51FN	0.0157	A (1)	0.1220					104	
21.51FN	0.0157	A (1)	0.1260			104	10001		
21.51FRR	0.0157	A (1)	0.2539		10101				
21.51FLL	0.0157	A (1)	0.2539	10001					
21.52FN	0.0315	A (1)	0.1181			10600			
32.5.5FN	0.0079	A (1)	0.1732						10001
32.5.5FN	0.0079	A (1)	0.1772			112			
32.51FN	0.0157	A (1)	0.1654					114	10101
32.51FN	0.0157	A (1)	0.1693			114			
32.52FN	0.0315	A (1)	0.1614			118			
32.52FRR	0.0315	A (1)	0.3819		10301				
32.52FLL	0.0315	A (1)	0.3819	10201					
32.53FLL	0.0472	A (1)	0.3819	10401					
431FN	0.0157	A (1)	0.1654					124	10201
431FN	0.0157	A (1)	0.1693			124			
432FN	0.0315	A (1)	0.1614			128			
433FRR	0.0472	A (1)	0.5079		10601				
433FLL	0.0472	A (1)	0.5079	10501					
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

CCGT / CCGW

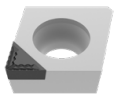
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPS30	-Q CTDPS30	-Q CTDPS30	CTDPS30	CTDPS30	-CB2 CTDPS30
									
				F	F	F	F	F	M
				DIAMOND CCGT	DIAMOND CCGW	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT
				71 166 ...	71 125 ...	71 126 ...	71 170 ...	71 170 ...	71 301 ...
ANSI	RE inch	TCE (NOI)	LE inch						
21.50FN	0.0039	A (1)	0.1378	20001					
21.5.5FN	0.0079	A (1)	0.1299		152	152			
21.5.5FN	0.0079	A (1)	0.1339	20101					202
21.51FN	0.0157	A (1)	0.1260						204
21.51FRR	0.0157	A (1)	0.2539					20101	
21.51FLL	0.0157	A (1)	0.2539				20001		
21.52FN	0.0315	A (1)	0.1181						208
21.52FRR	0.0315	A (1)	0.2539					20301	
21.52FLL	0.0315	A (1)	0.2539				20201		
32.50FN	0.0039	A (1)	0.1772		16300				
32.5.5FN	0.0079	A (1)	0.1732		162	162			
32.5.5FN	0.0079	A (1)	0.1772	20201					212
32.51FN	0.0157	A (1)	0.1693						214
32.52FN	0.0315	A (1)	0.1614						218
32.52FRR	0.0315	A (1)	0.3819					20501	
32.52FLL	0.0315	A (1)	0.3819				20401		
43.5FN	0.0079	A (1)	0.1732			172			
431FN	0.0157	A (1)	0.1654			174			
431FN	0.0157	A (1)	0.1693	20301					224
432FN	0.0315	A (1)	0.1614						228
433FRR	0.0472	A (1)	0.5079					20701	
433FLL	0.0472	A (1)	0.5079				20601		
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

9

CCGT / CCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				-Q-CB2 CTDPS30	CTDPU20	-CB3 CTDPU20	CTDPS30
							
				M	F	R	F
				DIAMOND CCGT	DIAMOND CCGW	DIAMOND CCGT	DIAMOND CCGW
				71 306 ...	71 171 ...	71 302 ...	71 171 ...
ANSI	RE inch	TCE (NOI)	LE inch				
21.50FN	0.0039	A (1)	0.1378				20001
21.5.5FN	0.0079	A (1)	0.1299	202			
21.5.5FN	0.0079	A (1)	0.1339				20101
21.51FN	0.0157	A (1)	0.1220	204			
21.51FN	0.0157	A (1)	0.1260			204	20201
32.5.5FN	0.0079	A (1)	0.1732	212			
32.5.5FN	0.0079	A (1)	0.1772				20301
32.51FN	0.0157	A (1)	0.1654	214			
32.51FN	0.0157	A (1)	0.1693		30001	214	20401
32.52FN	0.0315	A (1)	0.1614		30101	218	
43.5FN	0.0079	A (1)	0.1732	222			
431FN	0.0157	A (1)	0.1654	224			
431FN	0.0157	A (1)	0.1693				20501
P							
M							
K							
N				●	●	●	●
S							
H							
O				●	●	●	●

CCGW / CCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

	CTDCD10	-CB1 CTDCD10	-Q-CB1 CTDCD10	-CB2 CTDCD10	-Q-CB2 CTDCD10
					
	F	F	F	M	M
	DIAMOND CCGW	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT	DIAMOND CCGT
	71 171 ...	71 300 ...	71 167 ...	71 301 ...	71 306 ...

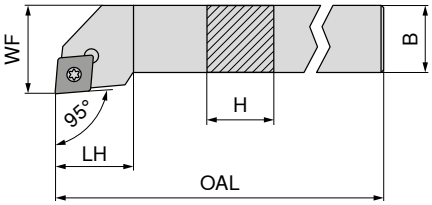
ANSI	RE inch	TCE (NOI)	LE inch									
21.5.5FN	0.0079	A (1)	0.0906					40001				
21.5.5FN	0.0079	A (1)	0.0945	40001		302				30200		
21.51FN	0.0157	A (1)	0.0827					40101				304
21.51FN	0.0157	A (1)	0.0866	40101		304				304		
21.52FN	0.0315	A (1)	0.0787			30600						
32.5.5FN	0.0079	A (1)	0.0906									31200
32.5.5FN	0.0079	A (1)	0.0945	40201						31200		
32.51FN	0.0157	A (1)	0.0827					40201				314
32.51FN	0.0157	A (1)	0.0866	40301		314				314		
32.52FN	0.0315	A (1)	0.0787	40401						31600		
431FN	0.0157	A (1)	0.0827					40301				324
431FN	0.0157	A (1)	0.0866							32600		
432FN	0.0315	A (1)	0.0787	40501								
432FN	0.0315	A (1)	0.0827							328		

P												
M												
K												
N				●		●		●		●		●
S												
H												
O				●		●		●		●		●

9

MaxiLock-S – SCLC 95° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 553 ...	Right-hand 78 552 ...
SCLC R/L 06-2	0.375	0.375	2.500	0.390	0.500	CC..21.5..	**00602**[1)]	**00602**[1)]
SCLC R/L 08-3	0.500	0.500	3.500	0.630	0.625	CC..32.5..	**00803**	**00803**
SCLC R/L 10-3	0.625	0.625	4.000	0.630	0.750	CC..32.5..	**01003**[1)]	**01003**[1)]
SCLC R/L 12-3B	0.750	0.750	4.500	0.630	1.000	CC..32.5..	**01223**	**01223**
SCLC R/L 16-3D	1.000	1.000	6.000	0.630	1.250	CC..32.5..	**01643**	**01643**
SCLC R/L 12-4B	0.750	0.750	4.500	1.000	1.000	CC..43..	**01224**[1)]	**01224**[1)]
SCLC R/L 16-4D	1.000	1.000	6.000	1.000	1.250	CC..43..	**01644**[1)]	**01644**[1)]
SCLC R/L 20-4D	1.250	1.250	6.000	1.000	1.500	CC..43..	**02044**[1)]	**02044**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

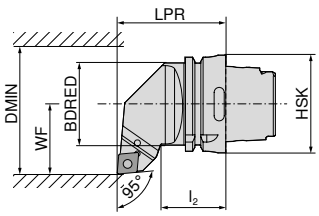

Carbide type C


Threaded sleeve

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 552 00602 / 78 553 00602	**06400**	**06200**		
78 552 00803 / 78 553 00803	**05700**	**05600**		
78 552 01003 / 78 553 01003	**05700**	**05600**		
78 552 01223 / 78 553 01223	**05700**	**05600**		
78 552 01643 / 78 553 01643	**05700**	**05600**		
78 552 01224 / 78 553 01224	**04700**		**04500**	**04800**
78 552 01644 / 78 553 01644	**04700**		**04500**	**04800**
78 552 02044 / 78 553 02044	**04700**		**04500**	**04800**

MaxiLock-S – SCLC 95° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 541 ...	Right-hand 74 540 ...
HSK T63 SCLC R/L 12	HSK-T 63	70	42	53	45	100	5	CC.. 1204	**512**	**512**


Combination Key


Clamping screw

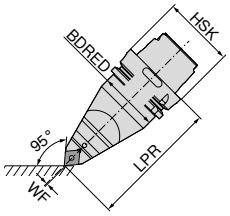

Carbide type C


Threaded sleeve

Spare parts	70 950 ...	70 950 ...	70 950 ...	70 950 ...
74 540 512 / 74 541 512	T15/SW **398**	M4.5x12 **114**	**166**	M4.5 **170**

MaxiLock-S – SCMC 50° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

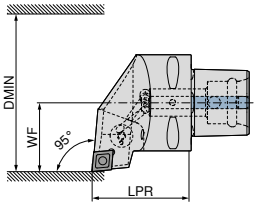



Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Neutral 74 542 ...
HSK T63 SCMC N 12	HSK-T 63	115	53	0	5	CC.. 1204	**512**

Spare parts	Combination Key 70 950 ...		Clamping screw 70 950 ...		Carbide type C 70 950 ...		Threaded sleeve 70 950 ...	
74 542 512	T15/SW	**398**	M4.5x12	**114**		**166**	M4.5	**170**

MaxiLock-S – SCLC 95° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions

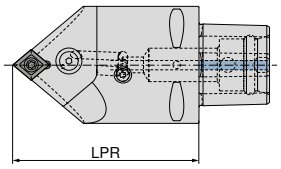
Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 655 ...	Right-hand 84 654 ...
PSC40 SCLC R/L 50050-12	PSC 40	50	27	50	5	CC.. 1204	DC	**01295**	**01295**
PSC50 SCLC R/L 65060-12	PSC 50	60	35	65	5	CC.. 1204	DC	**01294**	**01294**
PSC63 SCLC R/L 80065-12	PSC 63	65	45	80	5	CC.. 1204	DC	**01293**	**01293**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Spare parts	Clamping screw 84 950 ...
84 654 01293 / 84 655 01295	**27500**

MaxiLock-S – SCMC 50° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set



Neutral
84 674 ...

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 SCMC N 0100-12	PSC 63	100	5	CC.. 1204	DC	**01293**
PSC63 SCMC N 0130-12	PSC 63	130	5	CC.. 1204	DC	**11293**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Clamping screw
84 950 ...

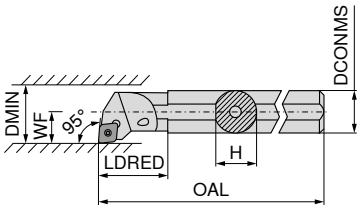
Spare parts

84 674 01293 / 84 674 11293	**27500**

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 719 ...	Right-hand 78 718 ...
S06M SCLC R/L 2	0.375	0.340	6.000	0.830	0.250	0.500	CC..21.5..	**20617**[1)]	**20617**[1)]
A06M SCLC L 2	0.375	0.340	6.000	0.830	0.250	0.500	CC..21.5..	**20606**	
S08M SCLC R/L 2	0.500	0.460	6.000	0.910	0.312	0.625	CC..21.5..	**20818**[1)]	**20818**[1)]
A08M SCLC R/L 2	0.500	0.460	6.000	0.910	0.312	0.625	CC..21.5..	**20808**[1)]	**20808**[1)]
S10R SCLC R/L 2	0.625	0.580	8.000	1.060	0.406	0.812	CC..21.5..	**21021**[1)]	**21021**[1)]
A10R SCLC R/L 2	0.625	0.580	8.000	1.060	0.406	0.812	CC..21.5..	**21010**	**21010**[1)]
S10R SCLC R/L 3	0.625	0.580	8.000	1.060	0.406	0.812	CC..32.5..	**31021**[1)]	**31021**[1)]
A10R SCLC R/L 3	0.625	0.580	8.000	1.060	0.406	0.812	CC..32.5..	**31010**	**31010**
S12S SCLC R/L 3M	0.750	0.710	10.000	1.580	0.500	1.000	CC..32.5..	**91222**[1)]	**91222**[1)]
A12S SCLC R/L 3M	0.750	0.710	10.000	1.580	0.500	1.000	CC..32.5..	**91212**	**91212**
S16T SCLC R/L 3M	1.000	0.900	12.000	1.810	0.640	1.280	CC..32.5..	**91626**[1)]	**91626**[1)]
S16T SCLC R/L 4	1.000	0.900	12.000	3.000	0.640	1.280	CC..43..	**41626**[1)]	**41626**[1)]
S20U SCLC R/L 4	1.250	1.180	14.000	3.000	0.765	1.530	CC..43..	**42030**[1)]	**42030**[1)]
S24V SCLC R/L 4	1.500	1.370	16.000	3.000	0.890	1.780	CC..43..	**42435**[1)]	**42435**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

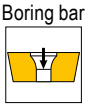

Carbide type C

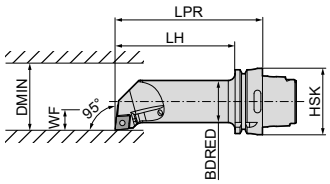

Threaded sleeve

Spare parts for Article no.	78 950 ... Key I - TORX®	78 950 ... Clamping screw	78 950 ... Carbide type C	78 950 ... Threaded sleeve
78 718 20617 / 78 719 20617	**06400**	**05200**		
78 719 20606	**06400**	**05200**		
78 718 20818 / 78 719 20818	**06400**	**05200**		
78 718 20808 / 78 719 20808	**06400**	**05200**		
78 718 21021 / 78 719 21021	**06400**	**05200**		
78 718 21010 / 78 719 21010	**06400**	**05200**		
78 718 31021 / 78 719 31021	**06400**	**05200**		
78 718 31010 / 78 719 31010	**05700**	**05800**		
78 718 91222 / 78 719 91222	**05700**	**05800**		
78 718 91212 / 78 719 91212	**05700**	**05800**		
78 718 91626 / 78 719 91626	**05700**	**05800**		
78 718 41626 / 78 719 41626	**06600**	**06500**		
78 718 42030 / 78 719 42030	**04700**	**04600**	**04500**	**04800**
78 718 42435 / 78 719 42435	**04700**	**04600**	**04500**	**04800**

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

Scope of supply:
Boring bar with Torx key





Illustrations show right-hand versions

Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 564 ...	Right-hand 74 563 ...
HSK T63 40L SCLC R/L 12	HSK-T 63	140	114	40	27	50	5	CC.. 1204	**512**	**512**

Combination Key **70 950 ...**

Clamping screw **70 950 ...**

Carbide type C **70 950 ...**

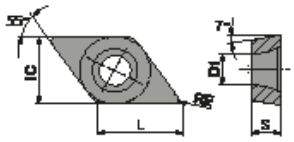
Threaded sleeve **70 950 ...**

Spare parts

74 563 512 / 74 564 512	T15/SW	**398**	M4.5x12	**114**	**166**	M4.5	**170**

DCGT / DCMT / DCET

Designation	L	S	D1	IC
	inch	inch	inch	inch
DC.T 21.5..	0.3051	0.0937	0.1102	0.2500
DC.T 32.5..	0.4567	0.1563	0.1732	0.3748

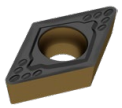
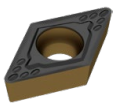
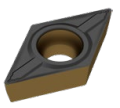
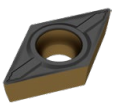
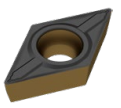
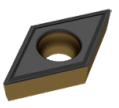
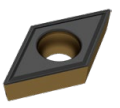


DCGT / DCMT

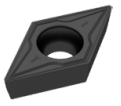
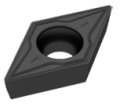
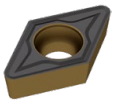
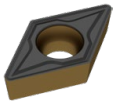
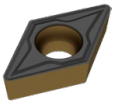
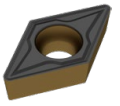
		-CF05 CTEP110	-CF55 CTEP110	-SF TCM407	-SF TCM10	-SMF TCM10	NEW -SF CTCP125-P	NEW -SF CTCP115-P
		DRAGONSKIN	DRAGONSKIN				DRAGONSKIN	DRAGONSKIN
		F	F	F	F	F	F	F
		CERMET DCGT	CERMET DCMT	CERMET DCGT	CERMET DCGT	CERMET DCMT	DCGT	DCMT
		76 245 ...	76 246 ...	70 257 ...	70 257 ...	70 265 ...	76 257 ...	76 259 ...
ANSI	RE inch							
21.5.5EN	0.0079	002	002		900	898	50201	
21.50EN	0.0039				898			
21.51EN	0.0157	004	004	852	902	900		30401
32.5.5EN	0.0079	014		854	904			
32.51EN	0.0157	016	016	856	906	904		31601
32.52EN	0.0315	018	018	858	908	906		31801
P		●	●	●	●	●	●	●
M		○	○	○	○	○		
K		○	○	○	○	○	○	○
N								
S								
H								
O								

9

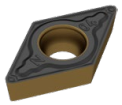
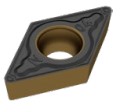
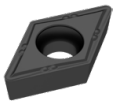
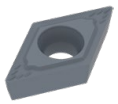
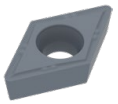
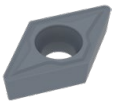
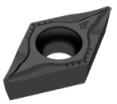
DCMT / DCGT

		NEW	NEW	NEW	NEW	NEW	NEW	NEW
		-SF CTCP125-P	-SF CTCP135-P	-SMF CTCP115-P	-SMF CTCP125-P	-SMF CTCP135-P	-SM CTCP125-P	-SM CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	M	M
		DCMT	DCMT	DCMT	DCMT	DCMT	DCGT	DCGT
		76 259 ...	76 259 ...	76 265 ...	76 265 ...	76 265 ...	76 256 ...	76 256 ...
ANSI	RE inch							
21.5.5EN	0.0079						50201	70201
21.51EN	0.0157	50401	70401		50401	70401		
21.52EN	0.0315					70601		
32.51EN	0.0157	51601	71601	31601	51601	71601		
32.52EN	0.0315	51801	71801	31801	51801	71801		
P		●	●	●	●	●	●	●
M			○			○		○
K		○		○	○		○	
N								
S								
H								
O								

DCMT

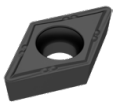
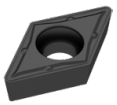
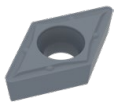
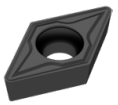
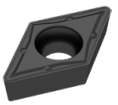
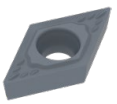
				NEW	NEW	NEW	NEW
		-SM CTCK110	-SM CTCK120	-SM CTCP115-P	-SM CTCP115-P	-SM CTCP125-P	-SM CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		M	M	M	M	M	M
		DCMT	DCMT	DCMT	DCMT	DCMT	DCMT
		70 258 ...	70 258 ...	76 183 ...	76 258 ...	76 258 ...	76 258 ...
ANSI	RE inch						
21.51EN	0.0157	004	554		30401	50401	70401
21.52EN	0.0315	006	506		30601	50601	70601
32.51EN	0.0157	016	516		31601	51601	71601
32.52EN	0.0315	018	518		31801	51801	71801
32.53EN	0.0472			32001		52001	
P		○	○	●	●	●	●
M							○
K		●	●	○	○	○	
N							
S							
H							
O							

DCMT

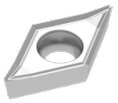
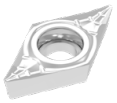
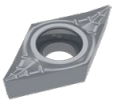
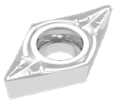
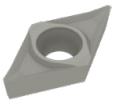
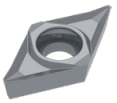
	NEW		NEW			NEW			NEW		NEW	
	-SMQ CTCP115-P		-SMQ CTCP125-P		-M25 CTCM120	-SF CTPM125		-M25 CTPM125		-SM CTPM125	-F43 CTCM130	
	DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	
												
	M		M		F	F		F		M	F	
	DCMT		DCMT		DCMT	DCMT		DCMT		DCMT	DCMT	
	76 195 ...		76 195 ...		75 213 ...	75 044 ...		75 213 ...		75 048 ...	75 032 ...	
ANSI	RE inch											
21.5.5EN	0.0079				10200			202				
21.50.5EN	0.0079											30200
21.51EN	0.0157	30401	50401		10400	20400		204				30400
32.5.5EN	0.0079				11400			214				
32.50.5EN	0.0079											31400
32.51EL	0.0157	31601	51601									
32.51EN	0.0157	31501	51501		11600	21600		216				31600
32.51ER	0.0157	31701	51701									
32.52EN	0.0315	31801	51801		11800	21800		218		21800		31800
P		●	●		○	○		○		○	○	
M					●	●		●		●	●	
K		○	○									
N												
S											○	
H												
O												

9

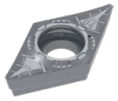
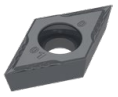
DCMT / DCGT

				NEW			NEW	
	-M25 CTCM130	-M55 CTCM120	-M55 CTPM125	-SM CTCM130	-M55 CTCM130	-SF CTPM125		
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		
								
	F	M	M	M	M	F		
	DCMT	DCMT	DCMT	DCMT	DCMT	DCGT		
	75 213 ...	75 214 ...	75 214 ...	75 048 ...	75 214 ...	75 043 ...		
ANSI	RE inch							
21.5.5EN	0.0079	30200						
21.50.5EN	0.0079							20200
21.51EN	0.0157	30400	10400	204	30400	30400		
21.52EN	0.0315		10600	206	30600	30600		
32.5.5EN	0.0079	31400						
32.51EN	0.0157	31600	11600	216	31600	31600		
32.52EN	0.0315	31800	11800	218	31800	31800		
P		○	○	○	○	○	○	
M		●	●	●	●	●	●	
K								
N								
S		○			○	○		
H								
O								

DCGT

	-23P H216T	-25P H210T	-25P CTPX710 DRAGONSKIN	-25Q H210T	-27 H10T	-27 CTPX715 DRAGONSKIN
						
	F	F	M	M	M	M
	DCGT	DCGT	DCGT	DCGT	DCGT	DCGT
	70 261 ...	70 263 ...	70 263 ...	70 263 ...	70 260 ...	70 260 ...
ANSI RE inch						
21.5.5FN 0.0079		**632**	**70200**		**600**	**80200**
21.51FN 0.0157	**654**	**634**	**70400**		**602**	**80400**
32.5.5FN 0.0079		**635**	**71400**		**604**	**81400**
32.51FN 0.0157	**664**	**636**	**71600**	**660**	**606**	**81600**
32.51FL 0.0157				**670**		
32.51FR 0.0157				**680**		
32.52FN 0.0315	**666**	**638**	**71800**	**662**	**608**	**81800**
32.52FL 0.0315				**672**		
32.52FR 0.0315				**682**		
P			●			●
M			●			●
K	○	○		○	○	○
N	●	●	●	●	●	●
S		○	●	○		●
H						
O	○	○		○	○	○

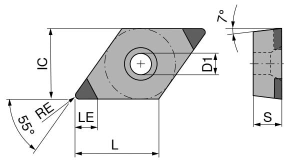
DCMT / DCET

		NEW		
		-29 H216T	-29 CTPX715	-F05 CTPX710
			DRAGONSKIN	DRAGONSKIN
				
		M	M	F
		DCMT	DCMT	DCET
		70 246 ...	70 246 ...	76 254 ...
ANSI	RE inch			
21.5.5FN	0.0079			10800
21.505FN	0.0059			10600
21.50FN	0.0039			10400
21.51EN	0.0157	60400	70400	
21.5X0FN	0.0020			10200
32.5.5FN	0.0079			12000
32.50FN	0.0039			11600
32.51EN	0.0157	61600	71600	
32.51FN	0.0157			12200
32.52EN	0.0315	61800	71800	
32.5X0FN	0.0059			11800
32.5X0FN	0.0020			11400
P			●	●
M			●	●
K		○	○	
N		●	●	●
S			●	●
H				
O		○	○	

9

DCGW

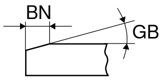
Designation	L inch	S inch	D1 inch	IC inch
DCGW 21.5..	0.3051	0.0937	0.0937	0.2500
DCGW 31.5..	0.4567	0.1563	0.1732	0.3748

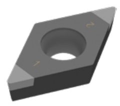
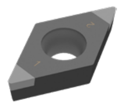
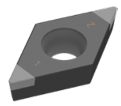


DCGW B

DCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners



	CTBH1000C	CTBH2000C	CTBH3000C
	NEW	NEW	NEW
			
	F	**F**	**F**
	PCBN	**PCBN**	**PCBN**
	DCGW	DCGW	DCGW
	71 007 ...	71 007 ...	71 007 ...

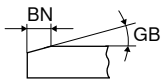
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch	CTBH1000C	CTBH2000C	CTBH3000C
21.5.5EN	0.0079			**B (2)**	0.1457	**70002**	**80002**	
21.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1457			**90002**
21.51EN	0.0157			**B (2)**	0.1417	**70302**	**80302**	
21.51SN	0.0157	0.0055	20°	**B (2)**	0.1417			**90302**
21.52EN	0.0315			**B (2)**	0.1299	**71202**	**81202**	
21.52SN	0.0315	0.0055	20°	**B (2)**	0.1299			**91202**
31.5.5EN	0.0079			**B (2)**	0.1457	**70602**	**80602**	
31.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1457			**90602**
31.51EN	0.0157			**B (2)**	0.1417	**70902**	**80902**	
31.51SN	0.0157	0.0055	20°	**B (2)**	0.1417			**90902**
31.52EN	0.0315			**B (2)**	0.1299	**71302**	**81302**	
31.52SN	0.0315	0.0055	20°	**B (2)**	0.1299			**91302**

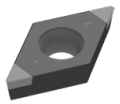
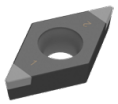
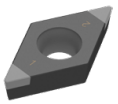
	CTBH1000C	CTBH2000C	CTBH3000C
P			
M			
K			
N			
S			
H	●	●	●
O			

→ v_c Page 196–199

DCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

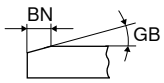


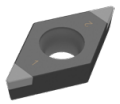
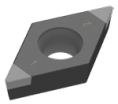
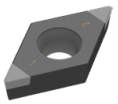
						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						M	M	M
						PCBN DCGW	PCBN DCGW	PCBN DCGW
						71 007 ...	71 007 ...	71 007 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.5.5SN	0.0079	0.0035	15°	**B (2)**	0.1457	**70102**	**80102**	
21.5.5SN	0.0079	0.0071	25°	**B (2)**	0.1457			**90102**
21.51SN	0.0157	0.0035	15°	**B (2)**	0.1417	**70402**	**80402**	
21.51SN	0.0157	0.0071	25°	**B (2)**	0.1417			**90402**
21.52SN	0.0315	0.0035	15°	**B (2)**	0.1299	**71402**	**81402**	
21.52SN	0.0315	0.0071	25°	**B (2)**	0.1299			**91402**
31.5.5SN	0.0079	0.0035	15°	**B (2)**	0.1457	**70702**	**80702**	
31.5.5SN	0.0079	0.0071	25°	**B (2)**	0.1457			**90702**
31.51SN	0.0157	0.0035	15°	**B (2)**	0.1417	**71002**	**81002**	
31.51SN	0.0157	0.0071	25°	**B (2)**	0.1417			**91002**
31.52SN	0.0315	0.0035	15°	**B (2)**	0.1299	**71502**	**81502**	
31.52SN	0.0315	0.0071	25°	**B (2)**	0.1299			**91502**
P								
M								
K								
N								
S								
H						●	●	●
O								

9

DCGW

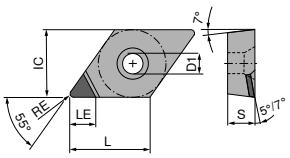
▲ TCE(NOI) = Design and number of equipped cutting edge corners



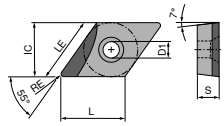
						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						R	R	R
						PCBN DCGW	PCBN DCGW	PCBN DCGW
						71 007 ...	71 007 ...	71 007 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1457	**70202**	**80202**	
21.5.5SN	0.0079	0.0079	35°	**B (2)**	0.1457			**90202**
21.51SN	0.0157	0.0055	20°	**B (2)**	0.1417	**70502**	**80502**	
21.51SN	0.0157	0.0079	35°	**B (2)**	0.1417			**90502**
21.52SN	0.0315	0.0055	20°	**B (2)**	0.1299	**71602**	**81602**	
21.52SN	0.0315	0.0079	35°	**B (2)**	0.1299			**91602**
31.5.5SN	0.0079	0.0055	20°	**B (2)**	0.1457	**70802**	**80802**	
31.5.5SN	0.0079	0.0079	35°	**B (2)**	0.1457			**90802**
31.51SN	0.0157	0.0055	20°	**B (2)**	0.1417	**71102**	**81102**	
31.51SN	0.0157	0.0079	35°	**B (2)**	0.1417			**91102**
31.52SN	0.0315	0.0055	20°	**B (2)**	0.1299	**71702**	**81702**	
31.52SN	0.0315	0.0079	35°	**B (2)**	0.1299			**91702**
P								
M								
K								
N								
S								
H						●	●	●
O								

DCGW / DCGT

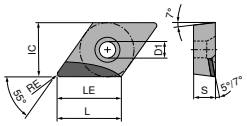
Designation	L inch	S inch	D1 inch	IC inch
DCG. 21.5..	0.3051	0.0937	0.1102	0.2500
DCG. 32.5..	0.4567	0.1563	0.1732	0.3748



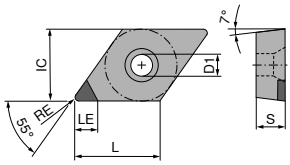
DCGT A



DCGT A L



DCGT A R



DCGW A

DCGW / DCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

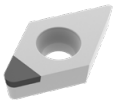
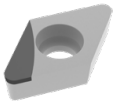
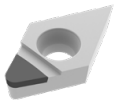
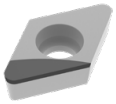
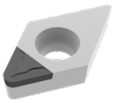
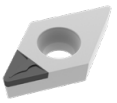
	CTDMD05	CTDMD05	-Q CTDMD05	-Q CTDMD05	CTDPD20	CTDPD20
	F	F	F	F	F	F
	DIAMOND DCGW	DIAMOND DCGT	DIAMOND DCGW	DIAMOND DCGT	DIAMOND DCGW	DIAMOND DCGT
	71 130 ...	71 134 ...	71 178 ...	71 176 ...	71 130 ...	71 134 ...
ANSI						
21.5.5FN	00200	050				
21.5.5FN					100	100
21.51FN	00400	052				
21.51FR				50001		
21.51FN					102	102
21.52FN	00600	054				
21.52FN					104	104
32.5.5FN		056				
32.5.5FN	056					
32.5.5FN					106	106
32.51FN		058				
32.51FL			50001			
32.51FN	058					
32.51FN					108	108
32.52FN		060				
32.52FN					110	110
32.53FN						11200
32.53FN					11200	

P						
M						
K						
N	●	●	●	●	●	●
S						
H						
O	●	●	●	●	●	●

9

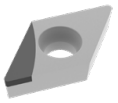
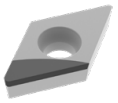
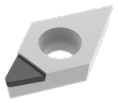
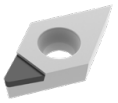
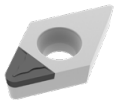
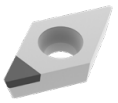
DCGW / DCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPS30	CTDPS30	CTDPS30	CTDPS30	-CB1 CTDPU20	-CB2 CTDPU20
									
				F	F	F	F	F	M
				DIAMOND DCGW	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT
				71 177 ...	71 173 ...	71 173 ...	71 173 ...	71 174 ...	71 175 ...
ANSI	RE inch	TCE (NOI)	LE inch						
21.50FN	0.0039	A (1)	0.1496	20001		20001			
21.5.5FN	0.0079	A (1)	0.1457	20101		20101		30001	
21.51FN	0.0157	A (1)	0.1339	20201				30101	30001
21.51FL	0.0157	A (1)	0.2165		20201				
21.52FN	0.0315	A (1)	0.1181	20301					
32.50FN	0.0039	A (1)	0.1890	20401		20301			
32.5.5FN	0.0079	A (1)	0.1850	20501		20401			
32.51FN	0.0157	A (1)	0.1693	20601				30201	30101
32.51FL	0.0157	A (1)	0.2953		20501				
32.52FN	0.0315	A (1)	0.1575	20701				30301	
32.52FL	0.0315	A (1)	0.2756		20601				
32.52FR	0.0315	A (1)	0.2756				20701		
32.53FN	0.0472	A (1)	0.1417	20801					
32.53FL	0.0472	A (1)	0.2559		20801				
32.53FR	0.0472	A (1)	0.2559				20901		
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

DCGT / DCGW

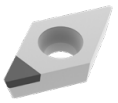
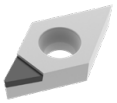
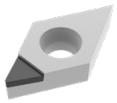
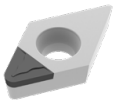
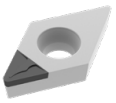
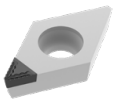
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPD20	CTDPD20	-Q CTDPD20	-Q CTDPD20	-CB1 CTDPD20	-Q CTDPS30
									
				F	F	F	F	F	F
				DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGW
				71 136 ...	71 135 ...	71 144 ...	71 145 ...	71 310 ...	71 138 ...
ANSI	RE inch	TCE (NOI)	LE inch						
21.50FN	0.0039	A (1)	0.1496					10100	
21.5.5FN	0.0079	A (1)	0.1457					102	
21.51FL	0.0157	A (1)	0.1181				104		
21.51FR	0.0157	A (1)	0.1181			104			
21.51FN	0.0157	A (1)	0.1339					104	
21.51FR	0.0157	A (1)	0.2165		102				
21.51FL	0.0157	A (1)	0.2165	102					
21.52FN	0.0315	A (1)	0.1181					108	
21.52FR	0.0315	A (1)	0.1969		104				
21.52FL	0.0315	A (1)	0.1969	104					
32.50FN	0.0039	A (1)	0.1890					11100	
32.5.5FR	0.0079	A (1)	0.1575						162
32.5.5FN	0.0079	A (1)	0.1850					112	
32.51FL	0.0157	A (1)	0.1575				114		
32.51FR	0.0157	A (1)	0.1575			114			164
32.51FN	0.0157	A (1)	0.1693					114	
32.51FR	0.0157	A (1)	0.2953		108				
32.51FL	0.0157	A (1)	0.2953	108					
32.52FN	0.0315	A (1)	0.1575					118	
32.52FR	0.0315	A (1)	0.2756		110				
32.52FL	0.0315	A (1)	0.2756	110					
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

9

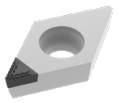
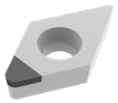
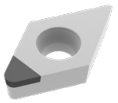
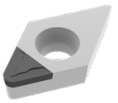
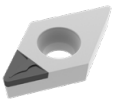
DCGW / DCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				-Q CTDPS30	-Q CTDPS30	-Q CTDPS30	-CB1 CTDPS30	-CB2 CTDPS30	-CB3 CTDPU20
									
				F	F	F	F	M	R
				DIAMOND DCGW	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT
				71 139 ...	71 144 ...	71 145 ...	71 310 ...	71 311 ...	71 312 ...
ANSI	RE inch	TCE (NOI)	LE inch						
21.50FL	0.0039	A (1)	0.1181			151			
21.50FR	0.0039	A (1)	0.1181		15000				
21.50FN	0.0039	A (1)	0.1496				20100		
21.5.5FL	0.0079	A (1)	0.1181			152			
21.5.5FR	0.0079	A (1)	0.1181		152				
21.5.5FN	0.0079	A (1)	0.1457				202	202	
21.51FN	0.0157	A (1)	0.1339				204	204	204
21.52FN	0.0315	A (1)	0.1181					208	
32.50FR	0.0039	A (1)	0.1575		161				
32.50FL	0.0039	A (1)	0.1575			161			
32.50FN	0.0039	A (1)	0.1890				21100	21100	
32.5.5FL	0.0079	A (1)	0.1575			162			
32.5.5FR	0.0079	A (1)	0.1575		162				
32.5.5FN	0.0079	A (1)	0.1850				212	212	
32.51FL	0.0157	A (1)	0.1575	164					
32.51FN	0.0157	A (1)	0.1693				214	214	214
32.52FN	0.0315	A (1)	0.1575				218	218	218
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

DCGT / DCGW

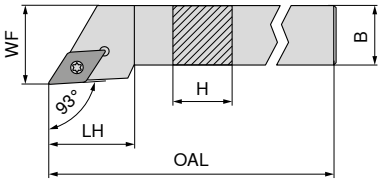
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				-CB3 CTDPU20	CTDPU20	CTDCD10	-CB1 CTDCD10	-CB2 CTDCD10
								
				R	F	F	F	M
				DIAMOND DCGT	DIAMOND DCGW	DIAMOND DCGW	DIAMOND DCGT	DIAMOND DCGT
				71 312 ...	71 177 ...	71 177 ...	71 310 ...	71 311 ...
ANSI	RE inch	TCE (NOI)	LE inch					
21.5.5FN	0.0079	A (1)	0.1024			40001	302	30200
21.51FN	0.0157	A (1)	0.0906			40101	304	304
21.51FN	0.0157	A (1)	0.1339	204	30001			
21.52FN	0.0315	A (1)	0.0787			40201		308
21.52FN	0.0315	A (1)	0.1181		30101			
32.5.5FN	0.0079	A (1)	0.1024			40301	31200	31200
32.51FN	0.0157	A (1)	0.0906			40401	314	314
32.51FN	0.0157	A (1)	0.1693	214	30201			
32.52FN	0.0315	A (1)	0.0787			40501	318	318
32.52FN	0.0315	A (1)	0.1575	218	30301			
P								
M								
K								
N				●	●	●	●	●
S								
H								
O				●	●	●	●	●

9

MaxiLock-S – SDJC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 555 ...	Right-hand 78 554 ...
SDJC R/L 06-2	0.375	0.375	2.500	0.590	0.500	DC..21.5..	**00602**[1)]	**00602**[1)]
SDJC R/L 08-2	0.500	0.500	3.500	0.670	0.625	DC..21.5..	**00802**	**00802**
SDJC R/L 10-2	0.625	0.625	4.000	0.670	0.750	DC..21.5..	**01002**[1)]	**01002**[1)]
SDJC R/L 12-2B	0.750	0.750	4.500	0.708	1.000	DC..21.5..	**01222**[1)]	**01222**[1)]
SDJC R/L 12-3B	0.750	0.750	4.500	1.000	1.000	DC..32.5..	**01223**	**01223**
SDJC R/L 16-3D	1.000	1.000	6.000	1.100	1.250	DC..32.5..	**01643**	**01643**

1) Not in stock


Key I - TORX®


Clamping screw

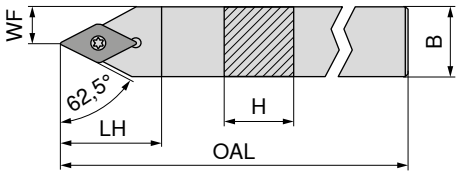

Solid Carbide Seat D

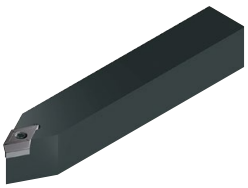

Threaded sleeve

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat D 78 950 ...	Threaded sleeve 78 950 ...
78 554 00602 / 78 555 00602	**06400**	**06200**		
78 554 00802 / 78 555 00802	**06400**	**06200**		
78 554 01002 / 78 555 01002	**06400**	**06200**		
78 554 01222 / 78 555 01222	**06400**	**06200**		
78 554 01223 / 78 555 01223	**05400**	**05100**	**06000**	**05300**
78 554 01643 / 78 555 01643	**05400**	**05100**	**06000**	**05300**

MaxiLock-S – SDPC 62.5° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key





Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 582 ...
SDPC N 06-2	0.375	0.375	2.500	0.370	0.197	DC..21.5..	**00602**[1)]
SDPC N 08-2	0.500	0.500	3.500	0.492	0.260	DC..21.5..	**00802**[1)]
SDPC N 10-3	0.625	0.625	4.000	0.630	0.232	DC..32.5..	**01003**[1)]
SDPC N 12-3B	0.750	0.750	4.500	0.744	0.382	DC..32.5..	**01223**[1)]
SDPC N 16-3D	1.000	1.000	6.000	0.984	0.520	DC..32.5..	**01643**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

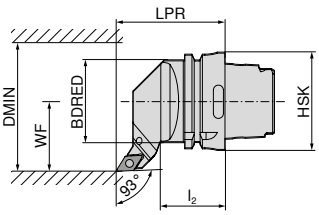

Solid Carbide Seat D


Threaded sleeve

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat D 78 950 ...	Threaded sleeve 78 950 ...
78 582 00602	**06400**	**06200**		
78 582 00802	**06400**	**06200**		
78 582 01003	**05400**	**05100**	**06000**	**05300**
78 582 01223	**05400**	**05100**	**06000**	**05300**
78 582 01643	**05400**	**05100**	**06000**	**05300**

MaxiLock-S – SDJC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 544 ...	Right-hand 74 543 ...
HSK T63 SDJC R/L 11	HSK-T 63	70	42	53	45	100	3.2	DC.. 11T3	**511**	**511**


Combination Key
70 950 ...


Clamping screw
70 950 ...


Solid Carbide Seat D
70 950 ...

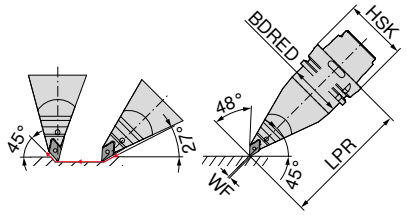

Threaded sleeve
70 950 ...

Spare parts

74 543 511 / 74 544 511	T15/SW	**398**	M3.5x11	**113**		**106**	M3.5	**171**

MaxiLock-S – SDMC 48° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Left-hand 74 546 ...
HSK T63 SDMC L 11	HSK-T 63	130	53	0	3.2	DC.. 11T3	**511**


Combination Key
70 950 ...


Clamping screw
70 950 ...


Solid Carbide Seat D
70 950 ...


Threaded sleeve
70 950 ...

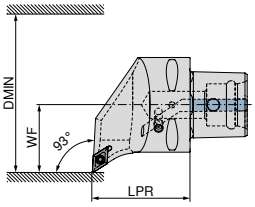
Spare parts

74 546 511	T15/SW	**398**	M3.5x11	**113**		**106**	M3.5	**171**

9

MaxiLock-S – SDUC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 84 659 ...	Right-hand 84 658 ...
PSC40 SDUC R/L 50050-11	PSC 40	50	27	50	3	DC.. 11T3	**01195**	**01195**
PSC50 SDUC R/L 65060-11	PSC 50	60	35	65	3	DC.. 11T3	**01194**	**01194**
PSC63 SDUC R/L 80065-11	PSC 63	65	45	80	3	DC.. 11T3	**01193**	**01193**

Clamping screw

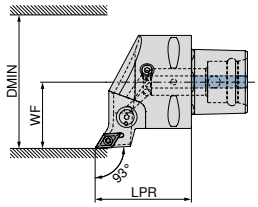
84 950 ...

Spare parts

84 658 01193 / 84 659 01195 **27600**

MaxiLock-S – SDJC 93° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set



Illustrations show right-hand versions

Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 663 ...	Right-hand 84 662 ...
PSC40 SDJC R/L 50050-11	PSC 40	50	27	50	3	DC.. 11T3	DC	**01195**	**01195**
PSC50 SDJC R/L 65060-11	PSC 50	60	35	65	3	DC.. 11T3	DC	**01194**	**01194**
PSC63 SDJC R/L 80065-11	PSC 63	65	45	80	3	DC.. 11T3	DC	**01193**	**01193**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Clamping screw

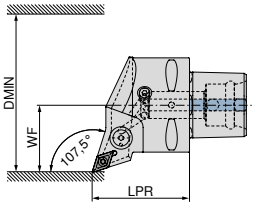
84 950 ...

Spare parts

84 662 01193 / 84 663 01195 **27600**

MaxiLock-S – SDHC 107.5° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set



Illustrations show right-hand versions

Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 667 ...	Right-hand 84 666 ...
PSC40 SDHC R/L 50050-11	PSC 40	50	27	50	3	DC.. 11T3	DC	**01195**	**01195**
PSC50 SDHC R/L 65060-11	PSC 50	60	35	65	3	DC.. 11T3	DC	**01194**	**01194**
PSC63 SDHC R/L 80065-11	PSC 63	65	45	80	3	DC.. 11T3	DC	**01193**	**01193**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

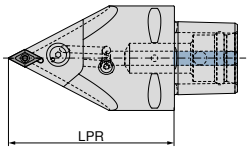
Clamping screw **84 950 ...**

Spare parts

84 666 01193 / 84 667 01195	**27600**

MaxiLock-S – SDNC 62.5° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set



Neutral **84 677 ...**

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 SDNC N 0100-11	PSC 63	100	3	DC.. 11T3	DC	**01193**
PSC63 SDNC N 0130-11	PSC 63	130	3	DC.. 11T3	DC	**11193**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Clamping screw **84 950 ...**

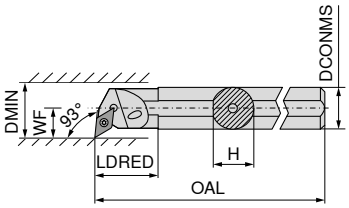
Spare parts

84 677 01193 / 84 677 11193	**27600**

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

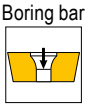
Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 721 ...	Right-hand 78 720 ...
S06M SDUC R/L 2	0.375	0.340	6.000	0.830	0.375	0.750	DC..21.5..	**20617**[1)]	**20617**[1)]
A06M SDUC R/L 2	0.375	0.340	6.000	0.830	0.375	0.750	DC..21.5..	**20606**	**20606**
S08M SDUC R/L 2	0.500	0.460	6.000	0.910	0.438	0.875	DC..21.5..	**20818**[1)]	**20818**[1)]
A08M SDUC R/L 2	0.500	0.460	6.000	0.910	0.438	0.875	DC..21.5..	**20808**[1)]	**20808**[1)]
S10R SDUC R/L 2	0.625	0.580	8.000	1.060	0.500	1.000	DC..21.5..	**21021**[1)]	**21021**[1)]
A10R SDUC R/L 2	0.625	0.580	8.000	1.060	0.500	1.000	DC..21.5..	**21010**	**21010**
S12S SDUC R/L 2EX	0.750	0.710	10.000	0.760	0.625	1.250	DC..21.5..	**21222**[1)]	**21222**[1)]
S16T SDUC R/L 2DX	1.000	0.900	12.000	1.000	0.750	1.500	DC..21.5..	**21626**[1)]	**21626**[1)]
S12S SDUC R/L 3M	0.750	0.710	10.000	1.580	0.625	1.250	DC..32.5..	**91222**[1)]	**91222**[1)]
A12S SDUC R/L 3M	0.750	0.710	10.000	1.580	0.625	1.250	DC..32.5..	**91212**[1)]	**91212**[1)]
S16T SDUC R/L 3M	1.000	0.910	12.000	1.810	0.750	1.500	DC..32.5..	**91626**[1)]	**91626**[1)]
S20U SDUC R/L 3M	1.250	1.180	14.000	1.890	0.875	1.750	DC..32.5..	**92030**[1)]	**92030**[1)]
S20U SDUC R/L 3X	1.250	1.180	14.000	1.270	0.765	1.750	DC..32.5..	**32030**[1)]	**32030**[1)]

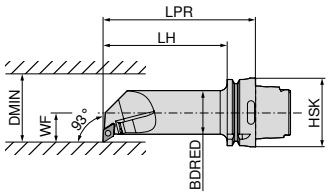
1) Not in stock

Spare parts for Article no.	 Key I - TORX® 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat D 78 950 ...	 Threaded sleeve 78 950 ...
78 720 20617 / 78 721 20617	**06400**	**05200**		
78 720 20606 / 78 721 20606	**06400**	**05200**		
78 720 20818 / 78 721 20818	**06400**	**05200**		
78 720 20808 / 78 721 20808	**06400**	**06200**		
78 720 21021 / 78 721 21021	**06400**	**05200**		
78 720 21010 / 78 721 21010	**06400**	**06200**		
78 720 21222 / 78 721 21222	**06400**	**06200**		
78 720 21626 / 78 721 21626	**06400**	**06200**		
78 720 91222 / 78 721 91222	**05700**	**05600**		
78 720 91212 / 78 721 91212	**05700**	**05600**		
78 720 91626 / 78 721 91626	**05700**	**05600**		
78 720 92030 / 78 721 92030	**05400**	**05100**	**06000**	**05300**
78 720 32030 / 78 721 32030	**05400**	**05100**	**06000**	**05300**

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

Scope of supply:
Boring bar with Torx key





Illustrations show right-hand versions

Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 566 ...		Right-hand 74 565 ...	
HSK T63 40L SDUC R/L 11	HSK-T 63	140	114	40	27	50	3.2	DC.. 11T3		**511**		**511**

Combination Key **70 950 ...**

Clamping screw **70 950 ...**

Solid Carbide Seat D **70 950 ...**

Threaded sleeve **70 950 ...**

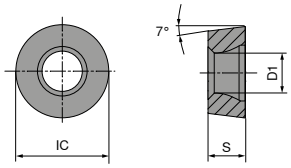
Spare parts

74 565 511 / 74 566 511	T15/SW	**398**	M3.5x11	**113**	**106**	M3.5	**171**

9

RCMT / RCGT

Designation	S inch	D1 inch	IC inch
RCGT 06..	0.0937	0.1102	0.2362
RCGT 08..	0.1252	0.1339	0.3150
RC.T 10..	0.1252	0.1575	0.3937
RCMT 10..	0.1563	0.1732	0.3937
RCMT 12..	0.1874	0.1929	0.4724
RCMT 16..	0.250	0.2087	0.6299
RCMT 20..	0.250	0.2559	0.7874
RCMT 25..	0.3126	0.2835	0.9843



RCMT / RCGT

			NEW		NEW		NEW		NEW		NEW	
			-SMF CTCK110		-SM CTCP115-P		-SM CTCP115-P		-SM CTCP125-P		-SM CTCP125-P		-SM CTCP135-P	
			DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
			F		M		M		M		M		M	
			RCMT		RCMT		RCMT		RCGT		RCMT		RCGT	
			70 188 ...		76 186 ...		76 264 ...		76 262 ...		76 264 ...		76 262 ...	
ANSI	RE inch													
0602MOEN	0.1181									50201				70201
0803MOEN	0.1575									51201				71201
1003MOSN	0.1969											51401		
1204MOSN	0.2362							32801				52601		
1606MOEN	0.3150		038											
1606MOSN	0.3150							34001				53801		
2006MOSN	0.3937				35001							55001		
2507MOSN	0.4921							36201				56201		
P			○		●		●		●		●		●	
M													○	
K			●		○		○		○		○			
N														
S														
H														
O														

RCMT

		NEW	NEW	NEW	NEW	NEW	NEW
		-SM CTCP135-P	-M23 CTCP115-P	-M23 CTCP115-P	-M23 CTCP125-P	-SM CTCM120	-SM CTPM125
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		M	M	M	M	M	M
		RCMT	RCMT	RCMT	RCMT	RCMT	RCMT
		76 264 ...	74 117 ...	74 121 ...	74 121 ...	75 221 ...	75 221 ...
ANSI	RE inch						
1003MOSN	0.1969	71401		21400		11400	
10T3MOSN	0.1969						
1204MOSN	0.2362	72601		22600	62600		
1606MOSN	0.3150	73801		23800	63800		
2006MOSN	0.3937	75001	25000		65000		25000
2507MOSN	0.4921	76201					26200
P		●	●	●	●	○	○
M		○				●	●
K			○	○	○		
N							
S							
H							
O							

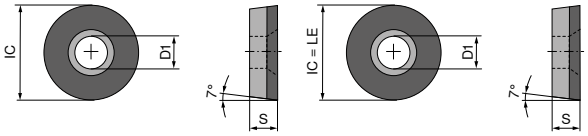
RCGT / RCMT

				NEW		
		-25P H210T	-27 H10T	-SM CTPX710	-27 CTPX715	
				DRAGONSKIN	DRAGONSKIN	
						
		F	M	M	M	
		RCGT	RCGT	RCMT	RCGT	
		70 241 ...	70 266 ...	75 221 ...	70 266 ...	
ISO	RE inch					
0602M0FN	0.1181		600		70200	
0803M0FN	0.1575	60200	602		80200	
1003M0FN	0.1969		604		80400	
1003M0SN	0.1969			61400		
P				●	●	
M				●	●	
K		○	○		○	
N		●	●	○	●	
S		○		●	●	
H						
O		○	○		○	

9

RCGW / RCGT

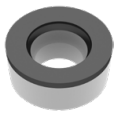
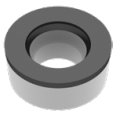
Designation	S inch	D1 inch	IC inch
RCG. 06..	0.0937	0.1102	0.2362
RCGW 10..	0.1252	0.1732	0.3937
RCGW 08..	0.1252	0.1339	0.3150
RCGT 10..	0.1563	0.1732	0.3937
RCGW 12..	0.1874	0.1732	0.4724



RCGT F RCGW F

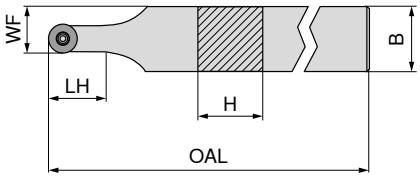
RCGW / RCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPD20	-CB1 CTDPD20	CTDPS30	-CB1 CTDPS30	-CB2 CTDPS30
								
				F	F	F	F	M
				DIAMOND RCGW	DIAMOND RCGT	DIAMOND RCGW	DIAMOND RCGT	DIAMOND RCGT
				71 179 ...	71 315 ...	71 179 ...	71 315 ...	71 316 ...
ANSI	RE inch	**TCE (NOI)**	LE inch					
0803M0FN	0.1575	**F**	0.3150	**10101**		**20101**		
0602M0FN	0.1181	**F**	0.2362	**10001**	**102**	**20001**	**202**	**202**
10T3M0FN	0.1969	**F**	0.3937		**104**		**204**	**204**
1003M0FN	0.2362	**F**	0.3937	**10201**				
1204M0FN	0.2362	**F**	0.4724	**10301**				
P								
M								
K								
N				●	●	●	●	●
S								
H								
O				●	●	●	●	●

MaxiLock-S – SRDC 0° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 583 ...
SRDC N 08-2	0.500	0.500	3.500	0.8661	0.407	RC..0803M0	**00802**[1]
SRDC N 10-3	0.625	0.625	4.000	0.7665	0.510	RC..10T3M0	**01003**[1]
SRDC N 12-3B	0.750	0.750	4.500	0.7665	0.570	RC..10T3M0	**01223**
SRDC N 16-4D	1.000	1.000	6.000	1.1024	0.756	RC..1204M0	**01644**
SRDC N 20-4D	1.250	1.250	6.000	1.1024	0.861	RC..1204M0	**02044**

1) Not in stock


Key I - TORX®


Clamping screw


Solid carbide support R

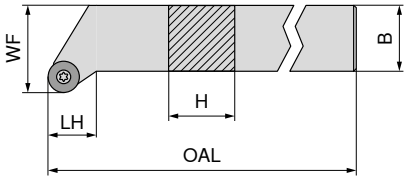

Threaded sleeve

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid carbide support R 78 950 ...	Threaded sleeve 78 950 ...
78 583 00802	**00100**	**00200**		
78 583 01003	**05400**	**05100**	**05900**	**05300**
78 583 01223	**05400**	**05100**	**05900**	**05300**
78 583 01644	**05400**	**05100**	**06300**	**05300**
78 583 02044	**05400**	**05100**	**06300**	**05300**

9

MaxiLock-S – SRGC – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	WF inch	Insert	Left-hand 78 557 ...	Right-hand 78 556 ...
SRGC R/L 12-3B	0.750	0.750	4.500	1.000	RC..10T3M0	**01223**	**01223**
SRGC R/L 16-3D	1.000	1.000	6.000	1.250	RC..10T3M0	**01643**[1]	**01643**[1]
SRGC R/L 16-4D	1.000	1.000	6.000	1.250	RC..1204M0	**01644**	**01644**
SRGC R/L 20-4D	1.250	1.250	6.000	1.500	RC..1204M0	**02044**[1]	**02044**[1]
SRGC R/L 85-4D	1.250	1.000	6.000	1.250	RC..1204M0	**08544**[1]	**08544**[1]

1) Not in stock


Key I - TORX®


Clamping screw

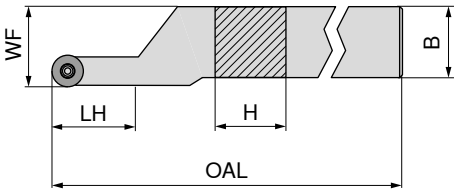

Solid carbide support R


Threaded sleeve

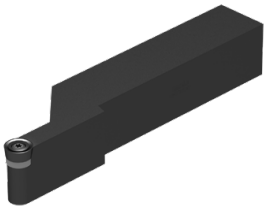
Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid carbide support R 78 950 ...	Threaded sleeve 78 950 ...
78 556 01223 / 78 557 01223	**05400**	**05100**	**05900**	**05300**
78 556 01643 / 78 557 01643	**05400**	**05100**	**05900**	**05300**
78 556 01644 / 78 557 01644	**05400**	**05100**	**06300**	**05300**
78 556 02044 / 78 557 02044	**05400**	**05100**	**06300**	**05300**
78 556 08544 / 78 557 08544	**05400**	**05100**	**06300**	**05300**

MaxiLock-S – SRSC 45° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions



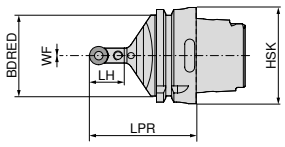
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 559 ...	Right-hand 78 558 ...
SRSC R/L 16-3D	1.000	1.000	6.000	0.750	1.250	RC..10T3M0	**01643**[1)]	**01643**[1)]
SRSC R/L 20-3D	1.250	1.250	6.000	0.750	1.500	RC..10T3M0	**02043**[1)]	**02043**[1)]
SRSC R/L 12-4B	0.750	0.750	4.500	0.750	1.000	RC..1204M0	**01224**[1)]	**01224**[1)]
SRSC R/L 16-4D	1.000	1.000	6.000	1.000	1.250	RC..1204M0	**01644**[1)]	**01644**[1)]
SRSC R/L 20-4D	1.250	1.250	6.000	1.000	1.500	RC..1204M0	**02044**[1)]	**02044**[1)]

1) Not in stock

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid carbide support R 78 950 ...	Threaded sleeve 78 950 ...
78 558 01643 / 78 559 01643	**05400**	**05100**	**05900**	**05300**
78 558 02043 / 78 559 02043	**05400**	**05100**	**05900**	**05300**
78 558 01224 / 78 559 01224	**05400**	**05100**	**06300**	**05300**
78 558 01644 / 78 559 01644	**05400**	**05100**	**06300**	**05300**
78 558 02044 / 78 559 02044	**05400**	**05100**	**06300**	**05300**

MaxiLock-N – PRDC 0° – Toolholder with lever clamping

Scope of supply:
Tool holder with allen key



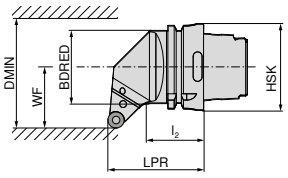
Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Neutral 74 548 ...
HSK T63 PRDC N 12	HSK-T 63	70	53	0	3	RC.. 1204 M0	**512**
HSK T100 PRDC N 12	HSK-T 100	80	88	0	3	RC.. 1204 M0	**712**
HSK T100 PRDC N 16	HSK-T 100	80	88	0	4	RC.. 1606 M0	**716**

Spare parts		Key I 70 950 ...	Shim 70 950 ...	Assembly pin 70 950 ...	Lever 70 950 ...	Clamping screw 70 950 ...	Solid carbide support R 70 950 ...
74 548 716	SW3	**176**	**196**	**192**	**387**	**390**	**384**
74 548 512 / 74 548 712	SW2.5	**175**	**197**	**191**	**178**		**215**

MaxiLock-N – PRSC – Toolholder with lever clamping

Scope of supply:

Tool holder with allen key



Illustrations show right-hand versions

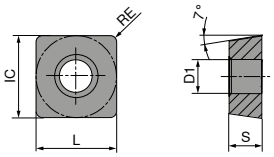
Designation	Adapter	LPR	l_2	BDRED	WF	DMIN	torque moment	Insert	Left-hand	Right-hand
		mm	mm	mm	mm	mm	Nm		74 552 ...	74 551 ...
HSK T63 PRSC R/L 12	HSK-T 63	70	44	53	45	100	3	RC.. 1204 M0	**512**	**512**
HSK T100 PRSC R/L 12	HSK-T 100	80	57	88	55	106	3	RC.. 1204 M0	**712**	**712**
HSK T100 PRSC R/L 16	HSK-T 100	80	55	88	55	125	4	RC.. 1606 M0	**716**	**716**

Spare parts		Key I	Shim	Assembly pin	Lever	Clamping screw	Solid carbide support R
		70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
74 551 716 / 74 552 716	SW3	**176**	**196**	**192**	**387**	**390**	**384**
74 551 512 / 74 552 712	SW2.5	**175**	**197**	**191**	**178**		**215**

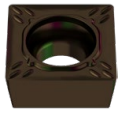
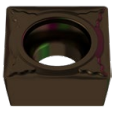
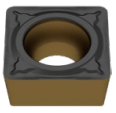
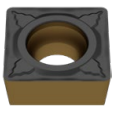
9

SCGT / SCMT

Designation	L inch	S inch	D1 inch	IC inch
SC.T 32..	0.3748	0.1563	0.1732	0.3748
SC.T 43..	0.5000	0.1874	0.2165	0.5000



SCGT / SCMT

		-CF05 CTEP110	-CF55 CTEP110	-SF TCM10	NEW -SF CTCP115-P	NEW -SF CTCP125-P	NEW -SMF CTCP115-P	NEW -SMF CTCP135-P
		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	F	F
		CERMET SCGT	CERMET SCMT	CERMET SCGT	SCMT	SCMT	SCMT	SCMT
		76 261 ...	76 260 ...	70 271 ...	76 187 ...	76 269 ...	76 267 ...	76 267 ...
ANSI	RE inch							
32.51EN	0.0157	004	004	902		50401	30401	
32.52EN	0.0315	006	006	904	30601	50601	30601	
432EN	0.0315					51801		71801
P		●	●	●	●	●	●	●
M		○	○	○				○
K		○	○	○	○	○	○	
N								
S								
H								
O								

SCMT

		NEW	NEW	NEW
		-SM CTCK110 DRAGONSKIN	-SM CTCK120 DRAGONSKIN	-SM CTCP115-P DRAGONSKIN
				
		M	M	M
		SCMT	SCMT	SCMT
		70 268 ...	70 268 ...	76 268 ...
ANSI	RE inch			
32.51EN	0.0157	004	504	30401
32.52EN	0.0315	006	506	30601
432EN	0.0315	018	518	31801
433EN	0.0472	020	520	
P		○	○	●
M				
K		●	●	○
N				
S				
H				
O				

		NEW	NEW	NEW
		-SM CTCP125-P DRAGONSKIN	-SM CTCP135-P DRAGONSKIN	
				
		M	M	
		SCMT	SCMT	
		76 268 ...	76 268 ...	
ANSI	RE inch			
32.51EN	0.0157	50401	70401	
32.52EN	0.0315	50601	70601	
432EN	0.0315	51801	71801	
433EN	0.0472	52001		
P		●	●	
M			○	
K		○		
N				
S				
H				
O				

SCMT

		NEW	NEW			
		-M25 CTPM125 DRAGONSKIN	-SM CTPM125 DRAGONSKIN	-M55 CTCM120 DRAGONSKIN	-M55 CTPM125 DRAGONSKIN	-M55 CTCM130 DRAGONSKIN
						
		F	M	M	M	M
		SCMT	SCMT	SCMT	SCMT	SCMT
		75 222 ...	75 049 ...	75 216 ...	75 216 ...	75 216 ...
ANSI	RE inch					
32.51EN	0.0157	70400				
32.52EN	0.0315		20600	10600	206	30600
432EN	0.0315		21800	11800	218	31800
P		○	○	○	○	○
M		●	●	●	●	●
K						
N						
S						○
H						
O						

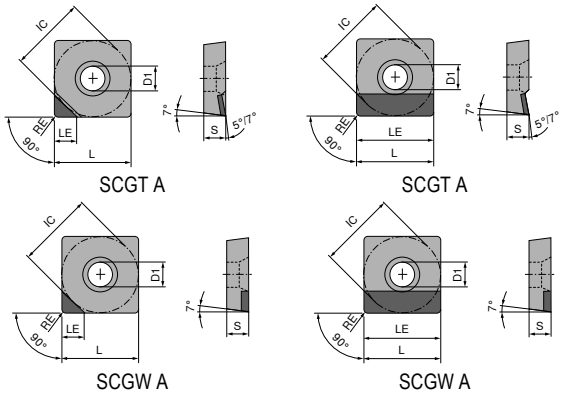
9

SCGT

		-25P H210T	-25P CTPX710	-27 CTPX715	-27 H10T
			DRAGONSKIN	DRAGONSKIN	
					
		F	M	M	M
		SCGT	SCGT	SCGT	SCGT
		70 283 ...	70 283 ...	70 270 ...	70 270 ...
ANSI	RE inch				
32.51FN	0.0157			80400	600
32.52FN	0.0315			80600	602
432FN	0.0315	634	71600	71800	604
P			●	●	
M			●	●	
K		○		○	○
N		●	●	●	●
S		○	●	●	
H					
O		○		○	○

SCGW / SCGT

Designation	L inch	S inch	D1 inch	IC inch
SCG. 32..	0.3748	0.1563	0.1732	0.3748
SCG. 43..	0.5000	0.1874	0.2165	0.5000



SCGT A SCGT A SCGW A SCGW A

SCGW / SCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPD20	CTDPD20	-CB1 CTDPD20	CTDPS30	CTDPS30
				F	F	F	F	F
				DIAMOND SCGW	DIAMOND SCGW	DIAMOND SCGT	DIAMOND SCGW	DIAMOND SCGT
				71 182 ...	71 183 ...	71 320 ...	71 182 ...	71 180 ...
ANSI	RE inch	TCE (NOI)	LE inch					
32.51FN	0.0157	A (1)	0.1732	10001		114	20601	20001
32.51FNN	0.0157	A (1)	0.3748		10001			
32.52FN	0.0315	A (1)	0.1693	10101		118		20101
32.52FNN	0.0315	A (1)	0.3748		10101			
32.53FN	0.0472	A (1)	0.1654	10201				20201
431FN	0.0157	A (1)	0.1732	10301				
431FNN	0.0157	A (1)	0.5000		10201			
432FN	0.0315	A (1)	0.1693	10401				
432FNN	0.0315	A (1)	0.5000		10301			
433FN	0.0472	A (1)	0.1654	10501				
433FNN	0.0472	A (1)	0.5000		10401			
P								
M								
K								
N				●	●	●	●	●
S								
H								
O				●	●	●	●	●

9

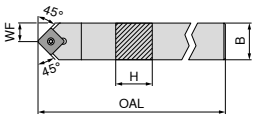
SCGT

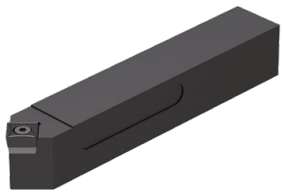
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDPS30	-CB2 CTDPS30	-CB3 CTDPU20
						
				F	M	R
				DIAMOND SCGT	DIAMOND SCGT	DIAMOND SCGT
				71 181 ...	71 321 ...	71 322 ...
ANSI	RE inch	**TCE (NOI)**	LE inch			
32.51FN	0.0157	**A (1)**	0.1732		214	214
32.52FN	0.0315	**A (1)**	0.1693		218	218
32.52FNN	0.0315	**A (1)**	0.3740	20001		
432FNN	0.0315	**A (1)**	0.5000	20101		
433FNN	0.0472	**A (1)**	0.4724	20201		
P						
M						
K						
N				●	●	●
S						
H						
O				●	●	●

MaxiLock-S – SSDC 45° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key





						Neutral
						78 584 ...
Designation	H inch	B inch	OAL inch	WF inch	Insert	
SSDC N 08-3	0.500	0.500	3.500	0.263	SC..32.5..	**00803**[1)]
SSDC N 10-3	0.625	0.625	4.000	0.325	SC..32.5..	**01003**[1)]
SSDC N 12-4B	0.750	0.750	4.500	0.388	SC..43..	**01224**[1)]

1) Not in stock

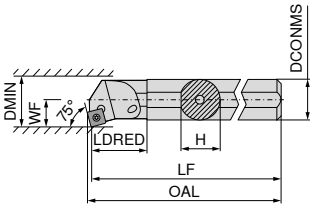
	 Key I - TORX®	 Clamping screw	 Solid Carbide support S	 Threaded sleeve
	78 950 ...	78 950 ...	78 950 ...	78 950 ...
Spare parts for Article no.				
78 584 00803	**05700**	**05600**		
78 584 01003	**05700**	**05600**		
78 584 01224	**04700**	**04600**	**04400**	**04800**

9

MaxiLock-S – SSKC 75° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 723 ...	Right-hand 78 722 ...
S10R SSKC R/L 3	0.625	0.580	8.000	1.060	0.406	0.812	SC..32.5..	**31021**[1)]	**31021**[1)]
S12S SSKC R/L 3	0.750	0.710	10.000	1.580	0.500	1.000	SC..32.5..	**31222**[1)]	**31222**[1)]
S16T SSKC R/L 3	1.000	0.900	12.000	1.810	0.640	1.280	SC..32.5..	**31626**[1)]	**31626**[1)]

1) Not in stock

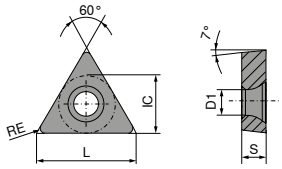
Key I - TORX®

Clamping screw

Spare parts for Article no.	78 950 ...	78 950 ...
78 722 31021 / 78 723 31021	**05700**	**05800**
78 722 31222 / 78 723 31222	**05700**	**05600**
78 722 31626 / 78 723 31626	**05700**	**05600**

TCGT / TCMT

Designation	L inch	S inch	D1 inch	IC inch
TCMT 1...	0.3780	0.0937	0.0984	0.2189
TC.T 21..	0.4331	0.0937	0.1102	0.2500
TC.T 32..	0.6496	0.1563	0.1732	0.3748
TCMT 43..	0.8661	0.1874	0.2032	0.5000



TCGT / TCMT

		NEW	NEW	NEW
	-CF05 CTEP110	-CF55 CTEP110	-SF TCM10	-SMF TCM10	-SF CTCP125-P	-SMF CTCP115-P	-SMF CTCP135-P
	DRAGONSKIN	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F	F	F	F	F	F	F
	CERMET TCGT	CERMET TCMT	CERMET TCGT	CERMET TCMT	TCMT	TCMT	TCMT
	76 272 ...	76 266 ...	70 273 ...	70 284 ...	76 275 ...	76 284 ...	76 284 ...
ANSI / RE inch							
21.5.5EN / 0.0079	014		900				
21.51EN / 0.0157	016	016	902	902	51601		
21.52EN / 0.0315	018				51801	31801	71801
32.51EN / 0.0157	028		906		52801	32801	
32.52EN / 0.0315		030			53001	33001	
P	●	●	●	●	●	●	●
M	○	○	○	○			○
K	○	○	○	○	○	○	
N							
S							
H							
O							

9

TCGT / TCMT

		NEW			NEW	NEW	NEW	NEW
		-SM CTCP135-P	-SM CTCK110	-SM CTCK120	-SM CTCP115-P	-SM CTCP115-P	-SM CTCP125-P	-SM CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	M
		TCGT	TCMT	TCMT	TCMT	TCMT	TCMT	TCMT
		76 270 ...	70 274 ...	70 274 ...	76 189 ...	76 274 ...	76 274 ...	76 274 ...
ANSI	RE inch							
1.81.51EN	0.0157						50401	70401
21.5.5EN	0.0079	71401						
21.51EN	0.0157		016	516		31601	51601	71601
21.52EN	0.0315		018	518		31801		71801
32.51EN	0.0157		028	528		32801	52801	72801
32.52EN	0.0315		030	530		33001	53001	73001
32.53EN	0.0472		032	532				
432EN	0.0315				34201		54201	74201
P		●	○	○	●	●	●	●
M		○						○
K			●	●	○	○	○	
N								
S								
H								
O								

TCMT

		NEW				NEW	
		-F43 CTCM130	-M25 CTCM120	-M25 CTPM125	-M25 CTCM130	-SM CTPM125	-M55 CTCM120
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		F	F	F	F	M	M
		TCMT	TCMT	TCMT	TCMT	TCMT	TCMT
		75 033 ...	75 217 ...	75 217 ...	75 217 ...	75 050 ...	75 218 ...
ANSI	RE inch						
1.81.51EN	0.0157			20400		20400	10400
21.51EN	0.0157	31600	11600	216	31600	21600	11600
32.51EN	0.0157	32800	12800	228	32800	22800	
32.52EN	0.0315	33000	13000	230	33000	23000	13000
432EN	0.0315					24200	
433EN	0.0472					24400	
P		○	○	○	○	○	○
M		●	●	●	●	●	●
K							
N							
S		○			○		
H							
O							

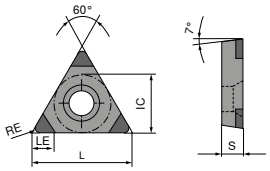
TCMT / TCGT

		-M55 CTPM125 DRAGONSKIN	-M55 CTCM130 DRAGONSKIN	-27 H10T	-27 CTPX715 DRAGONSKIN
					
		M	M	M	M
		TCMT	TCMT	TCGT	TCGT
		75 218 ...	75 218 ...	70 276 ...	70 276 ...
ANSI	RE inch				
1.81.51EN	0.0157	204	30400		
21.5.5FN	0.0079			600	71400
21.51EN	0.0157	216	31600		
21.51FN	0.0157			602	81600
32.5.5FN	0.0079			604	
32.51FN	0.0157			606	72800
32.52EN	0.0315	230	33000		
32.52FN	0.0315			608	83000
P		○	○		●
M		●	●		●
K				○	○
N				●	●
S			○		●
H					
O				○	○

9

TCGW

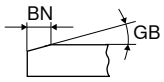
Designation	L inch	S inch	D1 inch	IC inch
TCGW 21.5..	0.4331	0.0937	0.1102	0.2500
TCGW 32.5..	0.6496	0.1563	0.1732	0.3748



TCGW C

TCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners



NEW

F

PCBN
TCGW

71 034 ...

NEW

F

PCBN
TCGW

71 034 ...

NEW

F

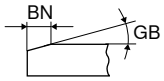
PCBN
TCGW

71 034 ...

ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch					
21.51EN	0.0157			C (3)	0.1417	70002		80002		
21.51SN	0.0157	0.0055	20°	C (3)	0.1417					90002
21.52EN	0.0315			C (3)	0.1299	70302		80302		
21.52SN	0.0315	0.0055	20°	C (3)	0.1299					90302
32.51EN	0.0157			C (3)	0.1417	70602		80602		
32.51SN	0.0157	0.0055	20°	C (3)	0.1417					90602
32.52EN	0.0315			C (3)	0.1299	70902		80902		
32.52SN	0.0315	0.0055	20°	C (3)	0.1299					90902
P										
M										
K										
N										
S										
H						●		●		●
O										

TCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

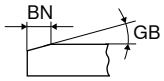


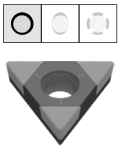
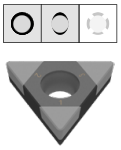
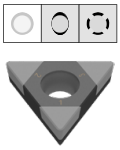
						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						M	M	M
						PCBN TCGW	PCBN TCGW	PCBN TCGW
						71 034 ...	71 034 ...	71 034 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.51SN	0.0157	0.0035	15°	**C (3)**	0.1417	**70102**	**80102**	
21.51SN	0.0157	0.0071	25°	**C (3)**	0.1417			**90102**
21.52SN	0.0315	0.0035	15°	**C (3)**	0.1299	**70402**	**80402**	
21.52SN	0.0315	0.0071	25°	**C (3)**	0.1299			**90402**
32.51SN	0.0157	0.0035	15°	**C (3)**	0.1417	**70702**	**80702**	
32.51SN	0.0157	0.0071	25°	**C (3)**	0.1417			**90702**
32.52SN	0.0315	0.0035	15°	**C (3)**	0.1299	**71002**	**81002**	
32.52SN	0.0315	0.0071	25°	**C (3)**	0.1299			**91002**
P								
M								
K								
N								
S								
H						●	●	●
O								

9

TCGW

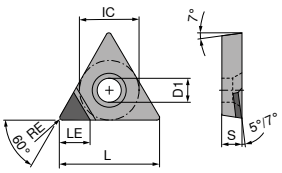
▲ TCE(NOI) = Design and number of equipped cutting edge corners



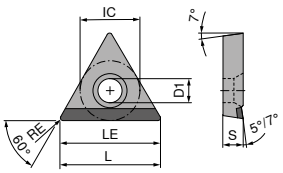
						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						R	R	R
						PCBN TCGW	PCBN TCGW	PCBN TCGW
						71 034 ...	71 034 ...	71 034 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
21.51SN	0.0157	0.0055	20°	**C (3)**	0.1417	**70202**	**80202**	
21.51SN	0.0157	0.0079	35°	**C (3)**	0.1417			**90202**
21.52SN	0.0315	0.0055	20°	**C (3)**	0.1299	**70502**	**80502**	
21.52SN	0.0315	0.0079	35°	**C (3)**	0.1299			**90502**
32.51SN	0.0157	0.0055	20°	**C (3)**	0.1417	**70802**	**80802**	
32.51SN	0.0157	0.0079	35°	**C (3)**	0.1417			**90802**
32.52SN	0.0315	0.0055	20°	**C (3)**	0.1299	**71102**	**81102**	
32.52SN	0.0315	0.0079	35°	**C (3)**	0.1299			**91102**
P								
M								
K								
N								
S								
H						●	●	●
O								

TCGW / TCGT

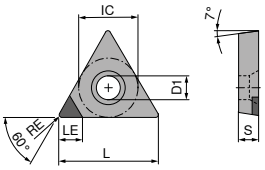
Designation	L inch	S inch	D1 inch	IC inch
TCGT 181...	0.3780	0.0937	0.0984	0.2189
TCGW 1.81..	0.3780	0.0937	0.0984	0.2189
TCG. 21.5..	0.4331	0.0937	0.1102	0.2500
TCG. 32.5..	0.6496	0.1563	0.1732	0.3748



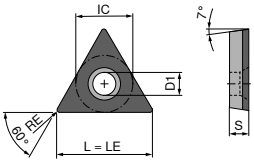
TCGT A



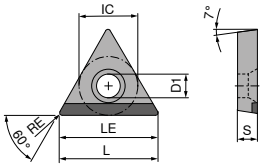
TCGT A



TCGW A



TCGW F



TCGW A

TCGW / TCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

	CTDPD20	CTDPD20	CTDPD20	CTDPD20	-CB1 CTDPD20	CTDPS30
	F	F	F	F	F	F
	DIAMOND TCGW	DIAMOND TCGW	DIAMOND TCGW	DIAMOND TCGT	DIAMOND TCGT	DIAMOND TCGT
	71 188 ...	71 187 ...	71 140 ...	71 184 ...	71 325 ...	71 184 ...
ANSI						
1.81.5.5FN	0.0079 A (1) 0.1457			100		
181.5.5FN	0.0079 A (1) 0.1457				112	20001
1.81.5.1FN	0.0157 A (1) 0.1339			102		
181.5.1FN	0.0157 A (1) 0.1339				114	20101
1.81.5.2FN	0.0315 A (1) 0.1181			104		
181.5.2FN	0.0315 A (1) 0.1181				10001	
1.81.5.2FNN	0.0315 A (1) 0.3780	10001				
21.5.5FN	0.0079 A (1) 0.1457			106	10101	122
21.5.5FN	0.0079 F 0.4331		10001			
21.51FN	0.0157 A (1) 0.1339			108	10201	124
21.51FN	0.0157 F 0.4331		10101			20201
21.51FNN	0.0157 A (1) 0.4331	10101				
21.52FN	0.0315 A (1) 0.1181			110	10301	
21.52FNN	0.0315 A (1) 0.4331	10201				
32.51FN	0.0157 A (1) 0.1811			112	10401	134
32.51FNN	0.0157 A (1) 0.6496	10301				20301
32.52FN	0.0315 A (1) 0.1654			114	10501	13600
32.52FNN	0.0315 A (1) 0.6496	10401				
32.53FN	0.0472 A (1) 0.1496			11600		
P						
M						
K						
N		●	●	●	●	●	●
S						
H						
O		●	●	●	●	●	●

9

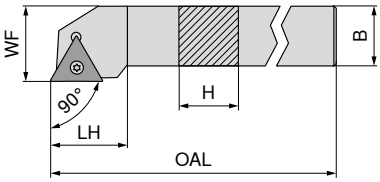
TCGW / TCGT

▲ TCE(NOI) = Design and number of equipped cutting edge corners

ANSI	RE inch	TCE (NOI)	LE inch	CTDPS30	CTDPS30	-CB2 CTDPS30	CTDPU20	-CB3 CTDPU20	CTDCD10
									
				F	F	M	F	R	F
				DIAMOND TCGW	DIAMOND TCGT	DIAMOND TCGT	DIAMOND TCGW	DIAMOND TCGT	DIAMOND TCGW
				71 186 ...	71 185 ...	71 326 ...	71 188 ...	71 327 ...	71 186 ...
181.5.5FN	0.0079	A (1)	0.1457			212			
1.81.5.5FN	0.0079	A (1)	0.1457	20001					
181.5.1FN	0.0157	A (1)	0.1339			214			
181.5.1FNN	0.0157	A (1)	0.3780		20001				
21.5.5FN	0.0079	A (1)	0.1024						40001
21.5.5FN	0.0079	A (1)	0.1457	20101		222			
21.51FN	0.0157	A (1)	0.0906						40101
21.51FN	0.0157	A (1)	0.1339	20201		224		224	
21.51FNN	0.0157	A (1)	0.4331		20101		30001		
21.52FN	0.0315	A (1)	0.0787						40201
21.52FNN	0.0315	A (1)	0.4331		20201				
32.51FN	0.0157	A (1)	0.0906						40301
32.51FN	0.0157	A (1)	0.1811			234			
32.51FNN	0.0157	A (1)	0.6496		20301				
32.52FN	0.0315	A (1)	0.0787						40401
32.52FN	0.0315	A (1)	0.1654					238	
32.52FNN	0.0315	A (1)	0.6496		20401				
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

MaxiLock-S – STGC 90° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 565 ...	Right-hand 78 564 ...
STGC R/L 06-2	0.375	0.375	2.500	0.500	0.500	TC..21.5..	**00602**[1)]	**00602**[1)]
STGC R/L 08-2	0.500	0.500	3.500	0.560	0.625	TC..21.5..	**00802**[1)]	**00802**[1)]
STGC R/L 10-3	0.625	0.625	4.000	1.000	0.750	TC..32.5..	**01003**[1)]	**01003**[1)]
STGC R/L 12-3B	0.750	0.750	4.500	1.000	1.000	TC..32.5..	**01223**[1)]	**01223**[1)]
STGC R/L 16-3D	1.000	1.000	6.000	1.000	1.250	TC..32.5..	**01643**[1)]	**01643**[1)]

1) Not in stock


Key I - TORX®


Clamping screw


Solid Carbide Seat T

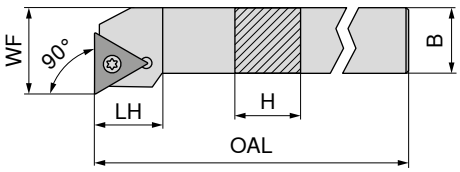

Threaded sleeve

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 564 00602 / 78 565 00602	**06400**	**06200**		
78 564 00802 / 78 565 00802	**06400**	**06200**		
78 564 01003 / 78 565 01003	**05400**	**05100**	**06100**	**05300**
78 564 01223 / 78 565 01223	**05400**	**05100**	**06100**	**05300**
78 564 01643 / 78 565 01643	**05400**	**05100**	**06100**	**05300**

9

MaxiLock-S – STFC 90° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 563 ...	Right-hand 78 562 ...
STFC R/L 06-2	0.375	0.375	2.500	0.400	0.500	TC..21.5..	**00602**[1)]	**00602**[1)]
STFC R/L 08-2	0.500	0.500	3.500	0.689	0.625	TC..21.5..	**00802**[1)]	**00802**[1)]
STFC R/L 10-3	0.625	0.625	4.000	1.000	0.750	TC..32.5..	**01003**[1)]	**01003**[1)]
STFC R/L 12-3B	0.750	0.750	4.500	1.000	1.000	TC..32.5..	**01223**[1)]	**01223**[1)]
STFC R/L 16-3D	1.000	1.000	6.000	1.000	1.250	TC..32.5..	**01643**[1)]	**01643**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

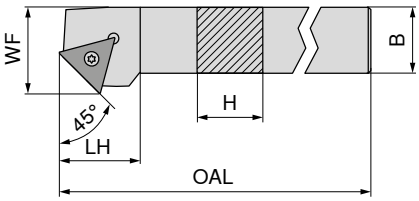

Solid Carbide Seat T


Threaded sleeve

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 562 00602 / 78 563 00602	**06400**	**06200**		
78 562 00802 / 78 563 00802	**06400**	**06200**		
78 562 01003 / 78 563 01003	**05400**	**05100**	**06100**	**05300**
78 562 01223 / 78 563 01223	**05400**	**05100**	**06100**	**05300**
78 562 01643 / 78 563 01643	**05400**	**05100**	**06100**	**05300**

MaxiLock-S – STDC 45° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 561 ...	Right-hand 78 560 ...
STDC R/L 06-2	0.375	0.375	2.500	0.410	0.433	TC..21.5..	**00602**[1)]	**00602**[1)]
STDC R/L 08-2	0.500	0.500	3.500	0.570	0.512	TC..21.5..	**00802**[1)]	**00802**[1)]
STDC R/L 10-3	0.625	0.625	4.000	1.000	0.669	TC..32.5..	**01003**[1)]	**01003**[1)]
STDC R/L 12-3B	0.750	0.750	4.500	1.000	0.866	TC..32.5..	**01223**[1)]	**01223**[1)]
STDC R/L 16-3D	1.000	1.000	6.000	1.000	1.063	TC..32.5..	**01643**[1)]	**01643**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

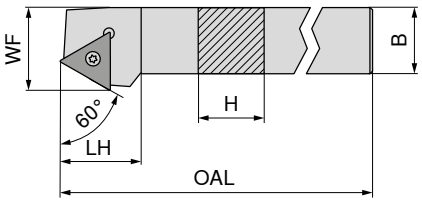

Solid Carbide Seat T


Threaded sleeve

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 560 00602 / 78 561 00602	**06400**	**06200**		
78 560 00802 / 78 561 00802	**06400**	**06200**		
78 560 01003 / 78 561 01003	**05400**	**05100**	**06100**	**05300**
78 560 01223 / 78 561 01223	**05400**	**05100**	**06100**	**05300**
78 560 01643 / 78 561 01643	**05400**	**05100**	**06100**	**05300**

MaxiLock-S – STTC 60° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 567 ...	Right-hand 78 566 ...
STTC R/L 12-3B	0.750	0.750	4.500	1.000	0.718	TC..32.5..	**01223**[1)]	**01223**[1)]
STTC R/L 16-3D	1.000	1.000	6.000	1.000	0.860	TC..32.5..	**01643**[1)]	**01643**[1)]

1) Not in stock


Key I - TORX®


Clamping screw


Solid Carbide Seat T

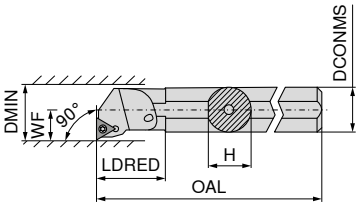

Threaded sleeve

Spare parts for Article no.	78 950 ...	78 950 ...	78 950 ...	78 950 ...
78 566 01223 / 78 567 01223	**05400**	**05100**	**06100**	**05300**
78 566 01643 / 78 567 01643	**05400**	**05100**	**06100**	**05300**

MaxiLock-S – STFC 90° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 725 ...	Right-hand 78 724 ...
S06M STFC R/L 2	0.375	0.340	6.000	0.850	0.250	0.500	TC..21.5..	**20617**[1)]	**20617**[1)]
A06M STFC R/L	0.375	0.340	6.000	0.850	0.250	0.500	TC..21.5..	**20606**	**20606**
S08M STFC R/L 2	0.500	0.460	6.000	0.800	0.312	0.625	TC..21.5..	**20818**[1)]	**20818**[1)]
A08M STFC R/L	0.500	0.460	6.000	0.800	0.312	0.625	TC..21.5..	**20808**[1)]	**20808**[1)]
S10R STFC R/L 2	0.625	0.580	8.000	0.960	0.406	0.812	TC..21.5..	**21021**[1)]	**21021**[1)]
A10R STFC R/L	0.625	0.580	8.000	0.960	0.406	0.812	TC..21.5..	**21010**	**21010**
S12S STFC R/L 2	0.750	0.710	10.000	1.420	0.500	1.000	TC..21.5..	**21222**[1)]	**21222**[1)]
A12S STFC R/L	0.750	0.710	10.000	1.420	0.500	1.000	TC..21.5..	**21212**[1)]	**21212**[1)]
S16T STFC R/L 3	1.000	0.900	12.000	1.930	0.640	1.280	TC..32.5..	**31626**[1)]	**31626**[1)]
S20U STFC R/L 3	1.250	1.180	14.000	1.970	0.765	1.530	TC..32.5..	**32030**[1)]	**32030**[1)]
S24V STFC R/L 3	1.500	1.370	16.000	2.360	0.890	1.780	TC..32.5..	**32435**[1)]	**32435**[1)]

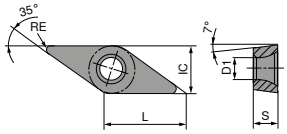
1) Not in stock

Spare parts for Article no.	 Key I - TORX® 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat T 78 950 ...	 Threaded sleeve 78 950 ...
78 724 20617 / 78 725 20617	**06400**	**05200**		
78 724 20606 / 78 725 20606	**06400**	**05200**		
78 724 20818 / 78 725 20818	**06400**	**05200**		
78 724 20808 / 78 725 20808	**06400**	**06200**		
78 724 21021 / 78 725 21021	**06400**	**06200**		
78 724 21010 / 78 725 21010	**06400**	**06200**		
78 724 21222 / 78 725 21222	**06400**	**06200**		
78 724 21212 / 78 725 21212	**06400**	**06200**		
78 724 31626 / 78 725 31626	**05700**	**05600**		
78 724 32030 / 78 725 32030	**05400**	**05100**	**06100**	**05300**
78 724 32435 / 78 725 32435	**05400**	**05100**	**06100**	**05300**

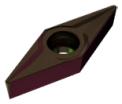
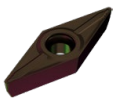
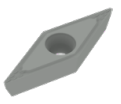
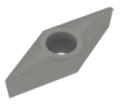
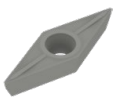
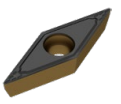
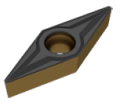
9

VCGT / VCMT / VCET

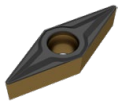
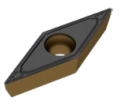
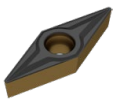
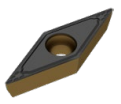
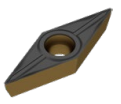
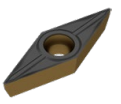
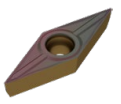
Designation	L inch	S inch	D1 inch	IC inch
VC.T 22..	0.4370	0.1252	0.1142	0.2500
VC.T 33..	0.6535	0.1874	0.1732	0.3748
VCGT 43..	0.8701	0.2189	0.2165	0.5000



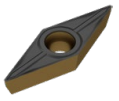
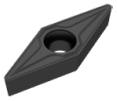
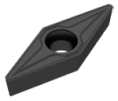
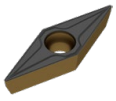
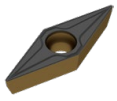
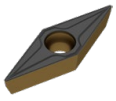
VCGT / VCMT

		NEW					NEW	NEW
		-CF05 CTEP110	-CF55 CTEP110	-SF TCM407	-SF TCM10	-SMF TCM10	-SF CTCP115-P	-SF CTCP115-P
		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	F	F
		CERMET VCGT	CERMET VCMT	CERMET VCGT	CERMET VCGT	CERMET VCMT	VCMT	VCGT
		76 276 ...	76 292 ...	70 277 ...	70 277 ...	70 288 ...	76 279 ...	76 277 ...
ANSI	RE inch							
22.5EN	0.0079	014		844	894			31401
220EN	0.0039				892			
221EN	0.0157	016	016	846	896	896		31601
222EN	0.0315							31801
331EN	0.0157	028	028	850	900	900	32801	
332EN	0.0315	030	030		902	902	33001	
P		●	●	●	●	●	●	●
M		○	○	○	○	○		
K		○	○	○	○	○	○	○
N								
S								
H								
O								

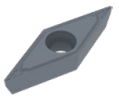
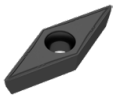
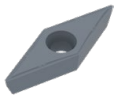
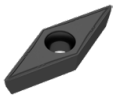
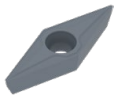
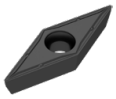
VCGT / VCMT

	NEW	NEW	NEW	NEW	NEW	NEW	NEW
	-SF CTCP125-P	-SF CTCP125-P	-SF CTCP135-P	-SF CTCP135-P	-SMF CTCP115-P	-SMF CTCP125-P	-SMF CTCP135-P
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	F	F	F
	VCGT	VCMT	VCGT	VCMT	VCMT	VCMT	VCGT
	76 277 ...	76 279 ...	76 277 ...	76 279 ...	76 288 ...	76 288 ...	76 285 ...
ANSI	RE inch						
22.5EN	0.0079	51401		71401				71401
221EN	0.0157	51601		71601		31601	51601	
222EN	0.0315	51801		71801				
331EN	0.0157		52801		72801	32801	52801	
332EN	0.0315		53001			33001	53001	
P		●	●	●	●	●	●	●
M				○	○			○
K		○	○			○	○	
N								
S								
H								
O								

VCMT

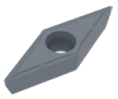
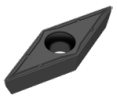
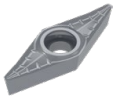
		NEW				NEW	NEW	NEW
		-SMF CTCP135-P	-SM CTCK110	-SM CTCK120	-SM CTCP115-P	-SM CTCP125-P	-SM CTCP135-P
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
		F	M	M	M	M	M
		VCMT	VCMT	VCMT	VCMT	VCMT	VCMT
		76 288 ...	70 278 ...	70 278 ...	76 278 ...	76 278 ...	76 278 ...
ANSI	RE inch						
221EN	0.0157	71601					
331.5EN	0.0236				32901		
331EN	0.0157	72801	028	528	32801	52801	72801
332EN	0.0315	73001	030	530	33001	53001	73001
333EN	0.0472		032	532	33201	53201	73201
P		●	○	○	●	●	●
M		○					○
K			●	●	○	○	
N							
S							
H							
O							

VCGT / VCMT

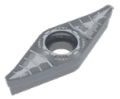
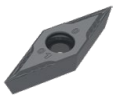
		NEW	NEW				NEW	
		-SF CTPM125	-SF CTPM125	-M25 CTCM120	-M25 CTPM125	-M25 CTCM130	-SM CTPM125	-M55 CTCM120
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	F	F	F	F	M	M
		VCGT	VCMT	VCMT	VCMT	VCMT	VCMT	VCMT
		75 045 ...	75 046 ...	75 219 ...	75 219 ...	75 219 ...	75 051 ...	75 220 ...
ANSI	RE inch							
220.5EN	0.0079	21400						
221EN	0.0157	21600						
331EN	0.0157		22800	12800	228	32800	22800	12800
332EN	0.0315		23000	13000	23000	33000	23000	13000
P		○	○	○	○	○	○	○
M		●	●	●	●	●	●	●
K								
N								
S						○		
H								
O								

9

VCMT / VCGT

		-M55 CTPM125	-M55 CTCM130	-25P H210T	-25P CTPX710	-25Q H210T	NEW -25Q CTPX710
		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN		
							
		M	M	F	M	M	M
		VCMT	VCMT	VCGT	VCGT	VCGT	VCGT
		75 220 ...	75 220 ...	70 282 ...	70 282 ...	70 282 ...	70 282 ...
ANSI	RE inch						
22.5FN	0.0079			638	71400		
221FL	0.0157					670	81600
221FN	0.0157			640	71600		
221FR	0.0157					680	81700
331EN	0.0157	228	32800				
331FN	0.0157			642	72800		
332EN	0.0315	230	33000				
332FN	0.0315			644	73000		
333FN	0.0472			646	73200		
43.57.5FN	0.1181			648	75000		
P		○	○		●		●
M		●	●		●		●
K				○		○	
N				●	●	●	●
S			○	○	●	○	●
H							
O				○		○	

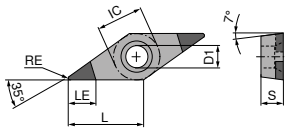
VCGT / VCMT / VCET

			NEW								
		-27 H10T		-27 CTPX715 DRAGONSKIN		-29 H216T		-29 CTPX715 DRAGONSKIN		-F05 CTPX710 DRAGONSKIN	
											
		M		M		M		M		F	
		VCGT		VCGT		VCMT		VCMT		VCET	
		70 280 ...		70 280 ...		70 247 ...		70 247 ...		76 255 ...	
ANSI	RE inch										
22.5FN	0.0079	606		81400						12000	
2205FN	0.0059									11800	
220FN	0.0039									11600	
221FN	0.0157	608		81600						12200	
222FN	0.0315	610		71800							
22X0FN	0.0020									11400	
331EN	0.0157						62800		72800		
331FN	0.0157	612		82800							
332EN	0.0315						63000		73000		
332FN	0.0315	614		83000							
333EN	0.0472						63200		73200		
333FN	0.0472	616									
43.57.5FN	0.1181	618									
P				●				●		●	
M				●				●		●	
K		○		○		○		○			
N		●		●		●		●		●	
S				●				●		●	
H											
O		○		○		○		○			

9

VCGW

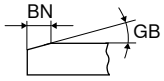
Designation	L inch	S inch	D1 inch	IC inch
VCGW 220...	0.4370	0.1252	0.1142	0.2500
VCGW 221E..	0.4370	0.1252	0.1142	0.2500
VCGW 221S..	0.4370	0.1252	0.1142	0.2500
VCGW 330...	0.6535	0.1874	0.1732	0.3748
VCGW 331E..	0.6535	0.1874	0.1732	0.3748
VCGW 331S..	0.6535	0.1874	0.1732	0.3748
VCGW 332E..	0.6535	0.1874	0.1732	0.3748
VCGW 332S..	0.6535	0.1874	0.1732	0.3748



VCGW B

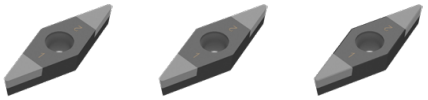
VCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners



NEW NEW NEW

CTBH1000C | CTBH2000C | CTBH3000C



F F F

PCBN VCGW | PCBN VCGW | PCBN VCGW

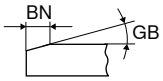
71 041 ... | 71 041 ... | 71 041 ...

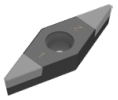
ANSI	RE inch	BN inch	GB	TCE (NOI)	LE inch					
220.5EN	0.0079			B (2)	0.2165	70002		80002		
220.5SN	0.0079	0.0055	20°	B (2)	0.2165					90002
221EN	0.0157			B (2)	0.2008	70302		80302		
221SN	0.0157	0.0055	20°	B (2)	0.2008					90302
330.5EN	0.0079			B (2)	0.2165	70602		80602		
330.5SN	0.0079	0.0055	20°	B (2)	0.2165					90602
331EN	0.0157			B (2)	0.2008	70902		80902		
331SN	0.0157	0.0055	20°	B (2)	0.2008					90902
332EN	0.0315			B (2)	0.1654	71202		81202		
332SN	0.0315	0.0055	20°	B (2)	0.1654					91202

P			
M			
K			
N			
S			
H	●	●	●
O			

VCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

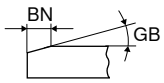


						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						M	M	M
						PCBN VCGW	PCBN VCGW	PCBN VCGW
						71 041 ...	71 041 ...	71 041 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
220.5SN	0.0079	0.0035	15°	**B (2)**	0.2165	**70102**	**80102**	
220.5SN	0.0079	0.0071	25°	**B (2)**	0.2165			**90102**
221SN	0.0157	0.0035	15°	**B (2)**	0.2008	**70402**	**80402**	
221SN	0.0157	0.0071	25°	**B (2)**	0.2008			**90402**
330.5SN	0.0079	0.0035	15°	**B (2)**	0.2165	**70702**	**80702**	
330.5SN	0.0079	0.0071	25°	**B (2)**	0.2165			**90702**
331SN	0.0157	0.0035	15°	**B (2)**	0.2008	**71002**	**81002**	
331SN	0.0157	0.0071	25°	**B (2)**	0.2008			**91002**
332SN	0.0315	0.0035	15°	**B (2)**	0.1654	**71302**	**81302**	
332SN	0.0315	0.0071	25°	**B (2)**	0.1654			**91302**
P								
M								
K								
N								
S								
H						●	●	●
O								

9

VCGW

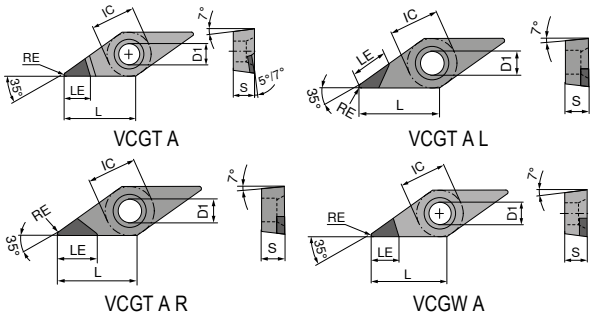
▲ TCE(NOI) = Design and number of equipped cutting edge corners



						NEW	NEW	NEW
						CTBH1000C	CTBH2000C	CTBH3000C
								
						R	R	R
						PCBN VCGW	PCBN VCGW	PCBN VCGW
						71 041 ...	71 041 ...	71 041 ...
ANSI	RE inch	BN inch	GB	**TCE (NOI)**	LE inch			
220.5SN	0.0079	0.0055	20°	**B (2)**	0.2165	**70202**	**80202**	
220.5SN	0.0079	0.0079	35°	**B (2)**	0.2165			**90202**
221SN	0.0157	0.0055	20°	**B (2)**	0.2008	**70502**	**80502**	
221SN	0.0157	0.0079	35°	**B (2)**	0.2008			**90502**
330.5SN	0.0079	0.0055	20°	**B (2)**	0.2165	**70802**	**80802**	
330.5SN	0.0079	0.0079	35°	**B (2)**	0.2165			**90802**
331SN	0.0157	0.0055	20°	**B (2)**	0.2008	**71102**	**81102**	
331SN	0.0157	0.0079	35°	**B (2)**	0.2008			**91102**
332SN	0.0315	0.0055	20°	**B (2)**	0.1654	**71402**	**81402**	
332SN	0.0315	0.0079	35°	**B (2)**	0.1654			**91402**
P								
M								
K								
N								
S								
H						●	●	●
O								

VCGT / VCGW

Designation	L inch	S inch	D1 inch	IC inch
VCG. 1...	0.2717	0.0937	0.0866	0.1563
VCG. 22..	0.4370	0.1252	0.1142	0.2500
VCG. 2...	0.5236	0.1252	0.1339	0.3126
VCG. 33..	0.6535	0.1874	0.1732	0.3748



VCGT / VCGW

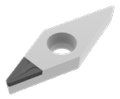
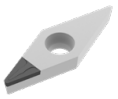
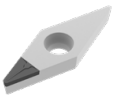
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				CTDMD05	CTDMD05	CTDPD20	CTDPD20	CTDPD20	CTDPD20
				F	F	F	F	F	F
				DIAMOND VCGT	DIAMOND VCGW	DIAMOND VCGW	DIAMOND VCGT	DIAMOND VCGT	DIAMOND VCGT
				71 189 ...	71 160 ...	71 160 ...	71 062 ...	71 063 ...	71 064 ...
ANSI	RE inch	TCE (NOI)	LE inch						
1.21.5.5FN	0.0079	A (1)		50001					
1.21.51FN	0.0157	A (1)		50101					
220FN	0.0039	A (1)	0.2126				10100		
22.5FN	0.0079	A (1)	0.1181		050				
22.5FN	0.0079	A (1)	0.1811	50201		100	100		
221FN	0.0157	A (1)	0.1181		052				
221FN	0.0157	A (1)	0.1535	50301		102	102		
221FR	0.0157	A (1)	0.2559					102	
221FL	0.0157	A (1)	0.2559						102
222FN	0.0315	A (1)	0.1299			104	104		
222FR	0.0315	A (1)	0.2362					104	
222FL	0.0315	A (1)	0.2362						104
330FN	0.0039	A (1)	0.2362				10700		
33.5FN	0.0079	A (1)	0.2323			105	105		
33.5FN	0.0079	A (1)		50401					
331FN	0.0157	A (1)	0.2165			106	106		
331FN	0.0157	A (1)		50501					
331FR	0.0157	A (1)	0.2953					106	
331FL	0.0157	A (1)	0.2953						106
332FN	0.0315	A (1)	0.1969		07800	108	108		
332FR	0.0315	A (1)	0.2756					108	
332FL	0.0315	A (1)	0.2756						108
332FN	0.0315	A (1)		50601					
333FN	0.0472	A (1)	0.1772			110	110		
333FR	0.0472	A (1)	0.2756					110	
333FL	0.0472	A (1)	0.2756						110
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

9

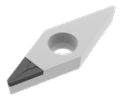
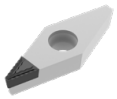
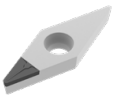
VCGT / VCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

				-CB1 CTDPD20	CTDPS30	CTDPS30	-CB1 CTDPS30	-CB2 CTDPS30	CTDPU20
									
				F	F	F	F	M	F
				DIAMOND VCGT	DIAMOND VCGW	DIAMOND VCGT	DIAMOND VCGT	DIAMOND VCGT	DIAMOND VCGW
				71 330 ...	71 191 ...	71 189 ...	71 330 ...	71 331 ...	71 191 ...
ANSI	RE inch	**TCE (NOI)**	LE inch						
1.21.50FN	0.0039	**A (1)**	0.1496			20001			
1.21.5.5FN	0.0079	**A (1)**	0.1417		20001				
1.21.51FN	0.0157	**A (1)**	0.1260		20101				
220FN	0.0039	**A (1)**	0.2126	11000	20201	20101			
22.5FN	0.0079	**A (1)**	0.1811	112	20301	20201	21200	212	
221FN	0.0157	**A (1)**	0.1535	114	20401	20301	214	214	
222FN	0.0315	**A (1)**	0.1299					21800	
2.52.5FN	0.0079	**A (1)**	0.2323		20501	20401			
330FN	0.0039	**A (1)**	0.2362		20601	20501			
33.5FN	0.0079	**A (1)**	0.2323	13200		20601		23200	
331FN	0.0157	**A (1)**	0.2165	134	20701	20701	234	234	30001
332FN	0.0315	**A (1)**	0.1969	138	20801		238	238	
333FN	0.0472	**A (1)**	0.1772	14000	20901		24000	242	
P									
M									
K									
N				●	●	●	●	●	●
S									
H									
O				●	●	●	●	●	●

VCGT / VCGW

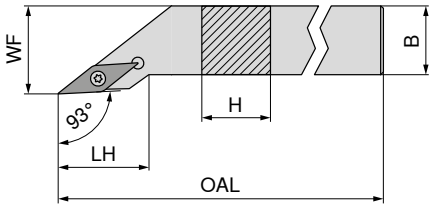
▲ TCE(NOI) = Design and number of equipped cutting edge corners

				-CB2 CTDPU20	-CB3 CTDPU20	CTDCD10	-CB1 CTDCD10	-CB2 CTDCD10
								
				M	R	F	F	M
				DIAMOND VCGT	DIAMOND VCGT	DIAMOND VCGW	DIAMOND VCGT	DIAMOND VCGT
				71 190 ...	71 332 ...	71 191 ...	71 330 ...	71 331 ...
ANSI	RE inch	TCE (NOI)	LE inch					
220FN	0.0039	A (1)	0.1181				31000	
22.5FN	0.0079	A (1)	0.1181			40001	312	312
221FN	0.0157	A (1)	0.1181			40101	314	314
221FN	0.0157	A (1)	0.1535		214			
222FN	0.0315	A (1)	0.1181			40201		
33.5FN	0.0079	A (1)	0.1181			40301	32200	33200
331FN	0.0157	A (1)	0.1181			40401	32400	334
331FN	0.0157	A (1)	0.2165	30001	234			
332FN	0.0315	A (1)	0.1181			40501	32600	338
333FN	0.0472	A (1)	0.1181				32800	34000
P								
M								
K								
N				●	●	●	●	●
S								
H								
O				●	●	●	●	●

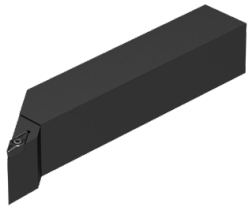
9

MaxiLock-S – SVJC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions



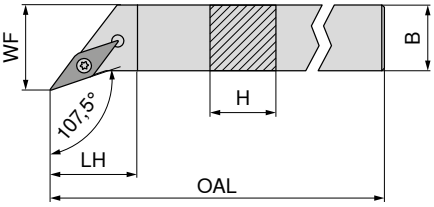
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 571 ...	Right-hand 78 570 ...
SVJC R/L 12-3B	0.750	0.750	4.500	1.610	1.000	VC..33..	**01223**	**01223**
SVJC R/L 16-3D	1.000	1.000	6.000	1.610	1.250	VC..33..	**01643**	**01643**
SVJC R/L 20-3D	1.250	1.250	6.000	1.610	1.500	VC..33..	**02043**[1)]	**02043**[1)]

1) Not in stock

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat V 78 950 ...	Threaded sleeve 78 950 ...
78 570 01223 / 78 571 01223	**05400**	**05100**	**05500**	**05300**
78 570 01643 / 78 571 01643	**05400**	**05100**	**05500**	**05300**
78 570 02043 / 78 571 02043	**05400**	**05100**	**05500**	**05300**

MaxiLock-S – SVHC 107.5° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



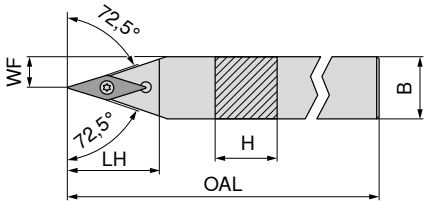
Illustrations show right-hand versions

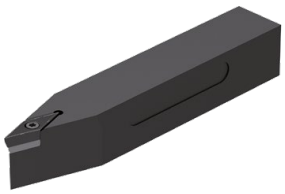
Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Left-hand 78 569 ...	Right-hand 78 568 ...
SVHC R/L 12-3B	0.750	0.750	4.500	0.744	1.000	VC..33..	**01223**	**01223**
SVHC R/L 16-3D	1.000	1.000	6.000	0.756	1.250	VC..33..	**01643**	**01643**

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat V 78 950 ...	Threaded sleeve 78 950 ...
78 568 01223 / 78 569 01223	**05400**	**05100**	**05500**	**05300**
78 568 01643 / 78 569 01643	**05400**	**05100**	**05500**	**05300**

MaxiLock-S – SVVC 72.5° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key





Designation	H inch	B inch	OAL inch	LH inch	WF inch	Insert	Neutral 78 585 ...
SVVC N 12-3B	0.750	0.750	4.500	1.212	0.398	VC..33..	**01223**
SVVC N 16-3D	1.000	1.000	6.000	1.610	0.523	VC..33..	**01643**
SVVC N 20-3D	1.250	1.250	6.000	2.008	0.648	VC..33..	**02043**[1)]

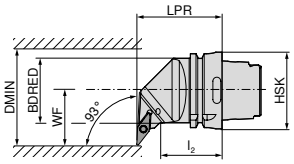
1) Not in stock

Spare parts for Article no.	 Key I - TORX® 78 950 ...	 Clamping screw 78 950 ...	 Solid Carbide Seat V 78 950 ...	 Threaded sleeve 78 950 ...
78 585 01223	**05400**	**05100**	**05500**	**05300**
78 585 01643	**05400**	**05100**	**05500**	**05300**
78 585 02043	**05400**	**05100**	**05500**	**05300**

9

MaxiLock-S – SVUC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key



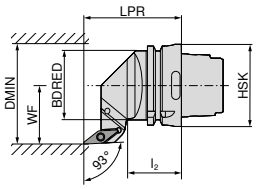
Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 557 ...	Right-hand 74 558 ...
HSK T63 SVUC R/L 16	HSK-T 63	70	42	53	45	100	3.2	VC.. 1604	**516**	**516**

Spare parts	 Combination Key 70 950 ...	 Clamping screw 70 950 ...	 Solid Carbide Seat V 70 950 ...	 Threaded sleeve 70 950 ...
74 558 516 / 74 557 516	T15/SW **398**	M3.5x11 **113**	**107**	M3.5 **171**

MaxiLock-S – SVJC 93° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 556 ...	Right-hand 74 555 ...
HSK T63 SVJC R/L 16	HSK-T 63	75	42	53	45	100	3.2	VC.. 1604	**516**	**516**


Combination Key **70 950 ...**


Clamping screw **70 950 ...**


Solid Carbide Seat V **70 950 ...**

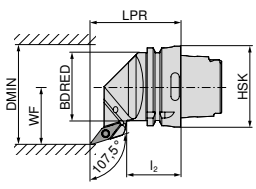

Threaded sleeve **70 950 ...**

Spare parts

74 555 516 / 74 556 516	T15/SW	**398**	M3.5x11	**113**		**107**	M3.5	**171**

MaxiLock-S – SVHC 107.5° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

Illustrations show right-hand versions

Designation	Adapter	LPR mm	l_2 mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 554 ...	Right-hand 74 553 ...
HSK T63 SVHC R/L 16	HSK-T 63	70	42	53	45	100	3.2	VC.. 1604	**516**	**516**


Combination Key **70 950 ...**


Clamping screw **70 950 ...**


Solid Carbide Seat V **70 950 ...**

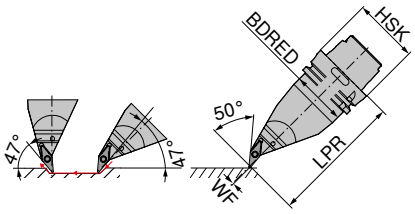

Threaded sleeve **70 950 ...**

Spare parts

74 553 516 / 74 554 516	T15/SW	**398**	M3.5x11	**113**		**107**	M3.5	**171**

MaxiLock-S – SVMC 50° – Toolholder with screw clamping

Scope of supply:
Tool holder with Torx key

Designation	Adapter	LPR mm	BDRED mm	WF mm	torque moment Nm	Insert	Left-hand 74 560 ...
HSK T63 SVMC L 16	HSK-T 63	130	53	0	3.2	VC.. 1604	**516**


Combination Key
70 950 ...


Clamping screw
70 950 ...


Solid Carbide Seat V
70 950 ...

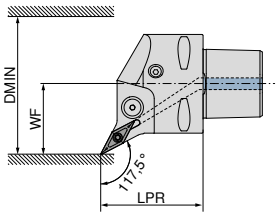

Threaded sleeve
70 950 ...

Spare parts

74 560 516	T15/SW	**398**	M3.5x11	**113**	**107**	M3.5	**171**

MaxiLock-S – SVPC 117.5° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set

Illustrations show right-hand versions

Designation	Adapter	LPR mm	WF mm	DMIN mm	torque moment Nm	Insert	Direct cooling compatible	Left-hand 84 671 ...	Right-hand 84 670 ...
PSC40 SVPC R/L 50050-16	PSC 40	50	27	50	3	VC.. 1604	DC	**01695**	**01695**
PSC50 SVPC R/L 65060-16	PSC 50	60	35	65	3	VC.. 1604	DC	**01694**	**01694**
PSC63 SVPC R/L 80065-16	PSC 63	65	45	80	3	VC.. 1604	DC	**01693**	**01693**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

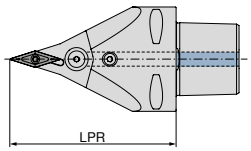

Clamping screw
84 950 ...

Spare parts

84 670 01693 / 84 671 01695	**27600**

MaxiLock-S – SVVC 72.5° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set

Neutral
84 678 ...

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 SVVC N 0100-16	PSC 63	100	3	VC.. 1604	DC	**01693**
PSC63 SVVC N 0130-16	PSC 63	130	3	VC.. 1604	DC	**11693**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

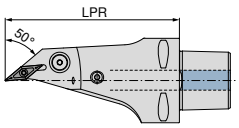
Clamping screw
84 950 ...

Spare parts

84 678 01693 / 84 678 11693 **27600**

MaxiLock-S – SVMC 50° – Toolholder with screw clamping

Scope of supply:
without high-performance coolant set

Neutral
84 681 ...

Designation	Adapter	LPR mm	torque moment Nm	Insert	Direct cooling compatible	
PSC63 SVMC L 0130-16	PSC 63	130	3	VC.. 1604	DC	**11693**

The high-performance coolant set with article number **84 950 27400** can be ordered as an optional extra → **Page 46.**

Clamping screw
84 950 ...

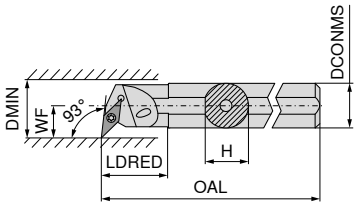
Spare parts

84 681 11693 **27600**

MaxiLock-S – SVUC 93° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 729 ...	Right-hand 78 728 ...
S10R SVUC R/L 2E	0.625	0.580	8.000	1.060	0.500	0.867	VC..22..	**21021**[1)]	**21021**[1)]
S12S SVUC R/L 2E	0.750	0.710	10.000	1.580	0.625	1.060	VC..22..	**21222**[1)]	**21222**[1)]
S16T SVUC R/L 2D	1.000	0.900	12.000	1.810	0.750	1.300	VC..22..	**21626**[1)]	**21626**[1)]
S20U SVUC R/L 3	1.250	1.180	14.000	3.000	1.000	2.000	VC..33..	**32030**[1)]	**32030**[1)]
S24V SVUC R/L 3	1.500	1.370	16.000	3.000	1.250	2.250	VC..33..	**32435**[1)]	**32435**[1)]
S32W SVUC R/L 3	2.000	1.870	18.000	4.000	1.375	2.750	VC..33..	**33243**[1)]	**33243**[1)]

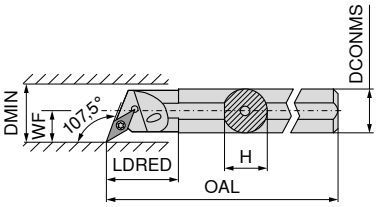
1) Not in stock

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat V 78 950 ...	Threaded sleeve 78 950 ...
78 728 21021 / 78 729 21021	**06400**	**06200**		
78 728 21222 / 78 729 21222	**06400**	**06200**		
78 728 21626 / 78 729 21626	**06400**	**06200**		
78 728 32030 / 78 729 32030	**05400**	**05100**	**05500**	**05300**
78 728 32435 / 78 729 32435	**05400**	**05100**	**05500**	**05300**
78 728 33243 / 78 729 33243	**05400**	**05100**	**05500**	**05300**

MaxiLock-S – SVQC 107.5° – Boring bar with screw clamping

▲ A... = with thru coolant
▲ S... = without thru coolant

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions

Designation	DCONMS inch	H inch	OAL inch	LDRED inch	WF inch	DMIN inch	Insert	Left-hand 78 727 ...	Right-hand 78 726 ...
S16T SVQC R/L 3	1.000	0.900	12.000	0.910	0.750	1.375	VC..33..	**31626**[1)]	**31626**[1)]
S20U SVQC R/L 3	1.250	1.180	14.000	1.060	0.875	1.625	VC..33..	**32030**[1)]	**32030**[1)]
S24V SVQC R/L 3	1.500	1.370	16.000	1.370	1.063	2.000	VC..33..	**32435**[1)]	**32435**[1)]

1) Not in stock


Key I - TORX®


Clamping screw

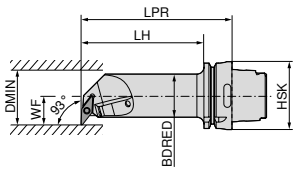

Solid Carbide Seat V


Threaded sleeve

Spare parts for Article no.	Key I - TORX® 78 950 ...	Clamping screw 78 950 ...	Solid Carbide Seat V 78 950 ...	Threaded sleeve 78 950 ...
78 726 31626 / 78 727 31626	**05700**	**05600**		
78 726 32030 / 78 727 32030	**05400**	**05100**	**05500**	**05300**
78 726 32435 / 78 727 32435	**05400**	**05100**	**05500**	**05300**

MaxiLock-S – SVUC 93° – Boring bar with screw clamping

Scope of supply:
Boring bar with Torx key



Illustrations show right-hand versions

Designation	Adapter	LPR mm	LH mm	BDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 74 568 ...	Right-hand 74 567 ...
HSK T63 40L SVUC R/L 16	HSK-T 63	140	114	40	27	50	3.2	VC.. 1604	**516**	**516**


Combination Key


Clamping screw

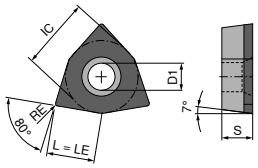

Solid Carbide Seat V


Threaded sleeve

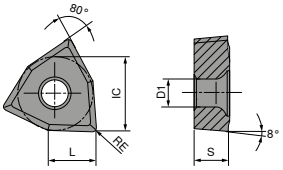
Spare parts	Combination Key 70 950 ...	Clamping screw 70 950 ...	Solid Carbide Seat V 70 950 ...	Threaded sleeve 70 950 ...
74 567 516 / 74 568 516	T15/SW **398**	M3.5x11 **113**	**107**	M3.5 **171**

WCGT / WCGW

Designation	L inch	S inch	D1 inch	IC inch
WCGW 1..	0.1063	0.0622	0.0906	0.1563
WCGT 1..	0.1067	0.0626	0.0827	0.1563



CBN/PKD WCGW F



WCGT

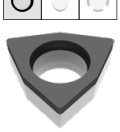
WCGT

	-SF TCM10	-SF CTPP430	-SF H216T
		DRAGONSKIN	
			
	F	F	F
	CERMET WCGT	WCGT	WCGT
	70 287 ...	70 287 ...	70 287 ...

ANSI	RE inch			
1.21.5EN	0.0079		450	
1.21.5FN	0.0079	900		600
1.211EN	0.0157		452	
1.211FN	0.0157	902		602
P		●	●	
M		○	●	
K		○	○	○
N			○	●
S			○	
H				
O				○

WCGW

▲ TCE(NOI) = Design and number of equipped cutting edge corners

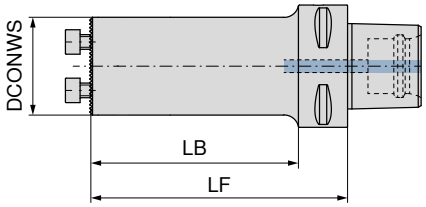
	CTDPD20
	
	F
	DIAMOND WCGW
	71 154 ...

ANSI	RE inch	TCE (NOI)	LE inch	
1.21.5FN	0.0079	F	0.1063	100
1.211FN	0.0157	F	0.1063	102
P				
M				
K				
N				●
S				
H				
O				●

9

MaxiChange – Base holders for the exchangeable head system

Scope of supply:
Includes clamping screws



NEW

Adapter	LF mm	LB mm	DCONWS mm	84 192 ...
PSC 40	40	20	16	**01695**
PSC 40	50	30	20	**02095**
PSC 40	55	35	25	**02595**
PSC 40	75	55	32	**03295**
PSC 40	80		40	**04095**
PSC 50	40	20	16	**01694**
PSC 50	50	30	20	**02094**
PSC 50	55	35	25	**02594**
PSC 50	75	55	32	**03294**
PSC 50	100	80	40	**04094**
PSC 63	40	18	16	**01693**
PSC 63	50	28	20	**02093**
PSC 63	65	43	25	**02593**
PSC 63	90	68	32	**03293**
PSC 63	125	103	32	**13293**
PSC 63	100	78	40	**04093**
PSC 63	140	118	40	**14093**

Clamping Screw

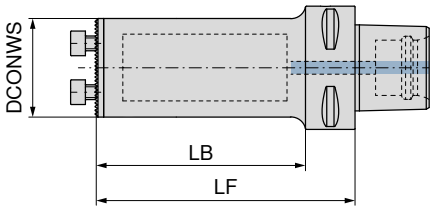
Spare parts for Article no.		84 950 ...
84 192 02595	M4X12 (SW3)	**30000**
84 192 03295	M5X14 (SW4)	**29900**
84 192 04095	M6X16 (SW5)	**29800**
84 192 02594	M4X12 (SW3)	**30000**
84 192 03294	M5X14 (SW4)	**29900**
84 192 04094	M6X16 (SW5)	**29800**
84 192 02593	M4X12 (SW3)	**30000**
84 192 03293	M5X14 (SW4)	**29900**
84 192 13293	M5X14 (SW4)	**29900**
84 192 04093	M6X16 (SW5)	**29800**
84 192 14093	M6X16 (SW5)	**29800**

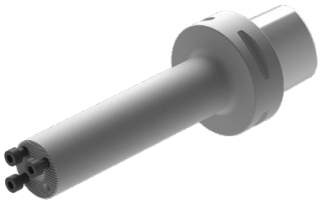
MaxiChange – Base holders for the exchangeable head system – vibration-damped

▲ Heavy metal core reduces vibrations

Scope of supply:

Includes clamping screws





Adapter	LF mm	LB mm	DCONWS mm	84 195 ...
PSC 63	115	93	25	**02593**
PSC 63	150	128	32	**03293**
PSC 63	185	163	40	**04093**

Clamping Screw

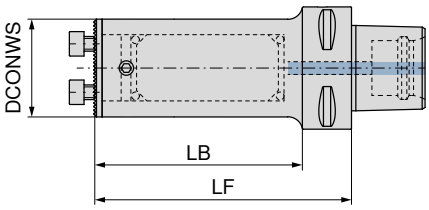
Spare parts for Article no.		84 950 ...
84 195 02593	M4X12 (SW3)	**30000**
84 195 03293	M5X14 (SW4)	**29900**
84 195 04093	M6X16 (SW5)	**29800**

9

MaxiChange – Base holders for the exchangeable head system – actively vibration-damped

▲ Reduction of vibrations through actively mounted dampers
▲ Improvement in surface finish and chip evacuation

Scope of supply:
Includes clamping screws



NEW

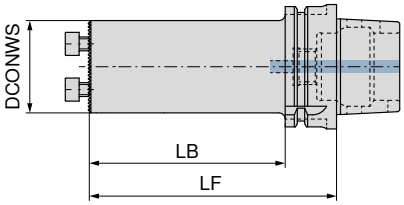
Adapter	LF mm	LB mm	DCONWS mm	84 198 ...
PSC 40	88	68	16	**31695**
PSC 40	107	87	20	**32095**
PSC 40	132	112	25	**42595**
PSC 40	154	134	32	**43295**
PSC 40	173		40	**44095**
PSC 50	85	65	16	**31694**
PSC 50	109	89	20	**32094**
PSC 50	133	113	25	**32594**
PSC 50	180	160	25	**42594**
PSC 50	154	134	32	**33294**
PSC 50	224	204	32	**43294**
PSC 50	194	174	40	**34094**
PSC 50	288	268	40	**44094**
PSC 63	90	68	16	**31693**
PSC 63	110	88	20	**32093**
PSC 63	132	110	25	**32593**
PSC 63	180	158	25	**42593**
PSC 63	230	208	25	**52593**
PSC 63	159	137	32	**33293**
PSC 63	224	202	32	**43293**
PSC 63	288	266	32	**53293**
PSC 63	198	176	40	**34093**
PSC 63	288	266	40	**44093**
PSC 63	368	346	40	**54093**

Clamping Screw

Spare parts for Article no.		84 950 ...
84 198 42595	M4X12 (SW3)	**30000**
84 198 43295	M5X14 (SW4)	**29900**
84 198 44095	M6X16 (SW5)	**29800**
84 198 32594	M4X12 (SW3)	**30000**
84 198 42594	M4X12 (SW3)	**30000**
84 198 33294	M5X14 (SW4)	**29900**
84 198 43294	M5X14 (SW4)	**29900**
84 198 34094	M6X16 (SW5)	**29800**
84 198 44094	M6X16 (SW5)	**29800**
84 198 32593	M4X12 (SW3)	**30000**
84 198 42593	M4X12 (SW3)	**30000**
84 198 52593	M4X12 (SW3)	**30000**
84 198 33293	M5X14 (SW4)	**29900**
84 198 43293	M5X14 (SW4)	**29900**
84 198 53293	M5X14 (SW4)	**29900**
84 198 34093	M6X16 (SW5)	**29800**
84 198 44093	M6X16 (SW5)	**29800**
84 198 54093	M6X16 (SW5)	**29800**

MaxiChange – Base holders for the exchangeable head system

Scope of supply:
Includes clamping screws



NEW

Adapter	LF mm	LB mm	DCONWS mm	84 193 ...
HSK-T 40	55	35	25	**02539**
HSK-T 40	75	55	25	**12539**
HSK-T 40	80	60	32	**03239**
HSK-T 40	80		40	**04039**
HSK-T 63	56	30	16	**01637**
HSK-T 63	80	54	20	**02037**
HSK-T 63	80	44	25	**02537**
HSK-T 63	90	64	32	**03237**
HSK-T 63	100	74	40	**04037**
HSK-T 63	125	99	32	**13237**
HSK-T 63	140	114	40	**14037**
HSK-T 100	140	111	40	**04035**

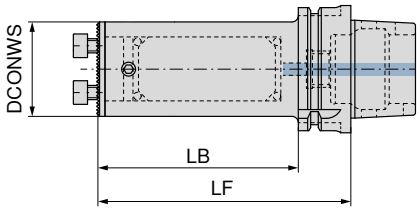

Clamping Screw

Spare parts for Article no.		84 950 ...
84 193 02539	M4X12 (SW3)	**30000**
84 193 12539	M4X12 (SW3)	**30000**
84 193 03239	M5X14 (SW4)	**29900**
84 193 04039	M6X16 (SW5)	**29800**
84 193 02537	M4X12 (SW3)	**30000**
84 193 03237	M5X14 (SW4)	**29900**
84 193 04037	M6X16 (SW5)	**29800**
84 193 13237	M5X14 (SW4)	**29900**
84 193 14037	M6X16 (SW5)	**29800**
84 193 04035	M6X16 (SW5)	**29800**

MaxiChange – Base holders for the exchangeable head system – actively vibration-damped

▲ Reduction of vibrations through actively mounted dampers
▲ Improvement in surface finish and chip evacuation

Scope of supply:
Includes clamping screws



NEW

Adapter	LF mm	LB mm	DCONWS mm	84 198 ...
HSK-T 63	90	64	16	**31637**
HSK-T 63	106	80	20	**32037**
HSK-T 63	126	100	25	**32537**
HSK-T 63	151	125	25	**42537**
HSK-T 63	154	128	32	**33237**
HSK-T 63	186	160	32	**43237**
HSK-T 63	186	160	40	**34037**
HSK-T 63	226	200	40	**44037**

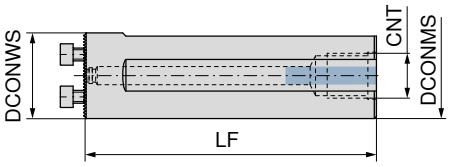
Clamping Screw

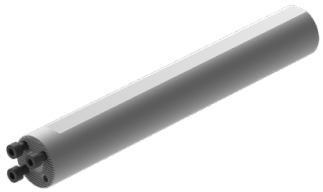
Spare parts for Article no.		84 950 ...
84 198 32537	M4X12 (SW3)	**30000**
84 198 42537	M4X12 (SW3)	**30000**
84 198 33237	M5X14 (SW4)	**29900**
84 198 43237	M5X14 (SW4)	**29900**
84 198 34037	M6X16 (SW5)	**29800**
84 198 44037	M6X16 (SW5)	**29800**

MaxiChange – Base holders for the exchangeable head system – cylindrical

▲ Connection thread for through coolant
▲ 3 clamping flats

Scope of supply:
Includes clamping screws





NEW

DCONWS mm	LF mm	DCONMS mm	CNT	84 194 ...
25	100	25	M8 x 1	**12599**
32	120	32	M8 x 1	**13299**
40	120	40	M8 x 1	**14099**
25	200	25	1/4	**02599**
32	218	32	3/8	**03299**
40	283	40	1/2	**04099**

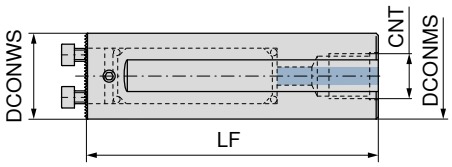
Clamping Screw

Spare parts for Article no.		84 950 ...
84 194 02599	M4X12 (SW3)	**30000**
84 194 03299	M5X14 (SW4)	**29900**
84 194 04099	M6X16 (SW5)	**29800**

MaxiChange – Base holders for the exchangeable head system – actively vibration-damped

▲ Reduction of vibrations through actively mounted dampers
▲ Improvement in surface finish and chip evacuation

Scope of supply:
Includes clamping screws



NEW

DCONWS mm	LF mm	DCONMS mm	CNT	84 198 ...
16	150	16	1/4	**31699**
20	180	20	1/4	**32099**
25	220	25	1/4	**32599**
32	285	32	1/2	**33299**
40	368	40	1/2	**34099**

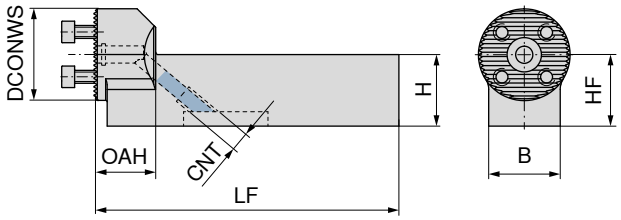
Clamping Screw

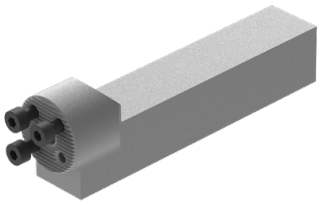
Spare parts for Article no.		84 950 ...
84 198 31699	M3x10	**44800**
84 198 32099	M3.5X12	**44900**
84 198 32599	M4X12 (SW3)	**30000**
84 198 33299	M5X14 (SW4)	**29900**
84 198 34099	M6X16 (SW5)	**29800**

MaxiChange – 0° base holders for the exchangeable head system

Scope of supply:
Includes clamping screws

Direct Cooling





NEW

DCONWS	H	B	HF	OAH	LF	CNT	84 185 ...
mm	mm	mm	mm	mm	mm		
25	20	20	20	21	106	M8x1	**02500**
32	20	20	20	21	106	M8x1	**03200**
32	25	25	25	21	106	M8x1	**13200**
40	25	25	25	21	106	M8x1	**14000**


Clamping Screw

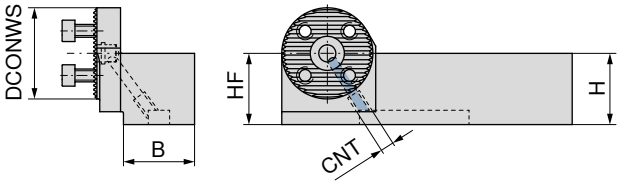
Spare parts for Article no.		84 950 ...
84 185 02500	M4X12 (SW3)	**30000**
84 185 03200	M5X14 (SW4)	**29900**
84 185 13200	M5X14 (SW4)	**29900**
84 185 14000	M6X16 (SW5)	**29800**

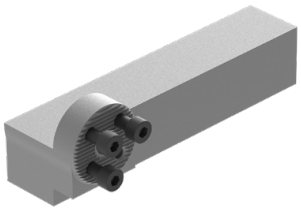
→ **Chapter 16 Adapters and accessories**
Here you will find the suitable base adaptors.

MaxiChange – 90° base holders for the exchangeable head system

Scope of supply:
Includes clamping screws

Direct Cooling





NEW

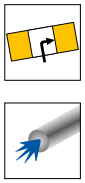
DCONWS mm	H mm	B mm	HF mm	CNT	84 184 ...
25	20	20	20	M8x1	**02500**
32	20	20	20	M8x1	**03200**
32	25	25	25	M8x1	**13200**
40	25	25	25	M8x1	**14000**

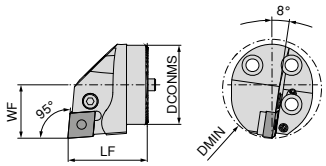
Clamping Screw

Spare parts for Article no.		84 950 ...
84 184 02500	M4X12 (SW3)	**30000**
84 184 03200	M4X12 (SW3)	**30000**
84 184 13200	M4X12 (SW3)	**30000**
84 184 14000	M6X16 (SW5)	**29800**

→ **Chapter 16 Adapters and accessories**
Here you will find the suitable base adaptors.

MaxiChange-N – Exchangeable cutting head PCLN 95°





Illustrations show right-hand versions

DCONMS	LF	DMIN	WF	torque moment	Insert	Left-hand	Right-hand
mm	mm	mm	mm	Nm		84 159 ...	84 160 ...
25	35	32	17	5	CN.. 1204	**02500**	**02500**
32	35	40	22	5	CN.. 1204	**03200**	**03200**
40	40	50	27	5	CN.. 1204	**04000**	**04000**


Shim

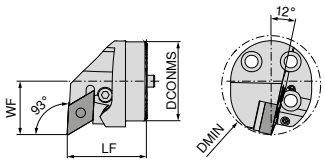

Elbow lever screw

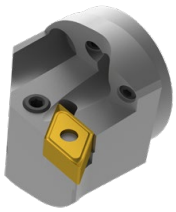

Lever


Carbide type C

Spare parts for Article no.						
	84 950 ...		84 950 ...		84 950 ...	84 950 ...
84 160 02500 / 84 159 02500	**29200**	M8X1/L17 SW3	**28700**	**29000**		**27800**
84 160 03200 / 84 159 03200	**29200**	M8X1/L17 SW3	**28700**	**29000**		**27800**
84 160 04000 / 84 159 04000	**29200**	M8X1/L17 SW3	**28700**	**29000**		**27800**

MaxiChange-N – Exchangeable cutting head PDUN 93°





Illustrations show right-hand versions

DCONMS	LF	DMIN	WF	torque moment	Insert	Left-hand	Right-hand
mm	mm	mm	mm	Nm		84 161 ...	84 162 ...
25	35	32	17	5	DN.. 1104	**02500**	**02500**
32	35	40	22	5	DN.. 1104	**03200**	**03200**
32	35	40	22	5	DN.. 1504 / 1506	**13200**	**13200**
40	40	50	27	5	DN.. 1104	**04000**	**04000**
40	40	50	27	5	DN.. 1504 / 1506	**14000**	**14000**

When using DN.. 1504 indexable inserts, use insert seat article no. **84 950 28200**.


Shim

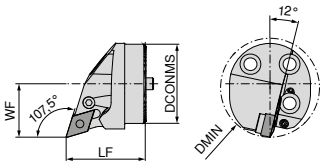

Elbow lever screw


Lever


Solid Carbide Seat D

Spare parts for Article no.						
	84 950 ...		84 950 ...		84 950 ...	84 950 ...
84 162 02500 / 84 161 02500	**29300**	M6/ L14 SW2.5	**28800**	**29100**		**28100**
84 162 03200 / 84 161 03200	**29300**	M6/ L14 SW2.5	**28800**	**29100**		**28100**
84 162 13200 / 84 161 13200	**29200**	M8X1/L17 SW3	**28700**	**28900**		**27900**
84 162 04000 / 84 161 04000	**29300**	M6/ L14 SW2.5	**28800**	**29100**		**28100**
84 162 14000 / 84 161 14000	**29200**	M8X1/L17 SW3	**28700**	**28900**		**27900**

MaxiChange-N – Exchangeable cutting head PDQN 107.5°

Illustrations show right-hand versions

DCONMS	LF	DMIN	WF	torque moment	Insert	Left-hand	Right-hand
mm	mm	mm	mm	Nm		84 163 ...	84 164 ...
25	35	32	17	5	DN.. 1104	**02500**	**02500**
32	35	40	22	5	DN.. 1104	**03200**	**03200**
40	40	50	27	5	DN.. 1104	**04000**	**04000**


Shim

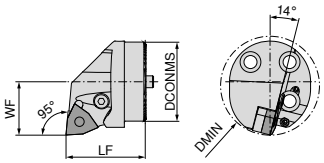

Elbow lever screw


Lever


Solid Carbide Seat D

Spare parts for Article no.	84 950 ...		84 950 ...	84 950 ...	84 950 ...
84 163 02500 / 84 164 02500	**29300**	M6/ L14 SW2.5	**28800**	**29100**	**28100**
84 163 03200 / 84 164 03200	**29300**	M6/ L14 SW2.5	**28800**	**29100**	**28100**
84 163 04000 / 84 164 04000	**29300**	M6/ L14 SW2.5	**28800**	**29100**	**28100**

MaxiChange-N – Exchangeable cutting head PWLN 95°

Illustrations show right-hand versions

DCONMS	LF	DMIN	WF	torque moment	Insert	Left-hand	Right-hand
mm	mm	mm	mm	Nm		84 165 ...	84 166 ...
32	35	40	22	5	WN.. 0804	**03200**	**03200**
40	40	50	27	5	WN.. 0804	**04000**	**04000**


Shim

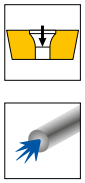

Elbow lever screw

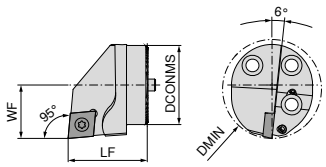

Lever

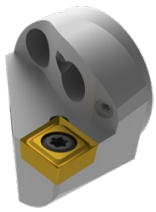

Solid Carbide Seat W

Spare parts for Article no.	84 950 ...		84 950 ...	84 950 ...	84 950 ...
84 166 03200 / 84 165 03200	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27700**
84 166 04000 / 84 165 04000	**29200**	M8X1/L17 SW3	**28700**	**28900**	**27700**

MaxiChange-S – SCLC 95° – Exchangeable cutting head with screw clamping







Illustrations show right-hand versions

DCONMS	LF	DMIN	WF	torque moment	Insert	NEW Left-hand	NEW Right-hand
mm	mm	mm	mm	Nm		84 147 ...	84 148 ...
16	20	20	11	0.9	CC.. 0602	**01600**	**01600**
20	20	25	13	3	CC.. 09T3	**02000**	**02000**
25	35	32	17	5	CC.. 1204	**02500**	**02500**
32	35	40	22	5	CC.. 1204	**03200**	**03200**
40	40	50	27	5	CC.. 1204	**04000**	**04000**

Clamping screw

84 950 ...

Spare parts for Article no.	
84 148 02500 / 84 147 02500	**27500**
84 148 03200 / 84 147 03200	**27500**
84 148 04000 / 84 147 04000	**27500**

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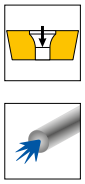
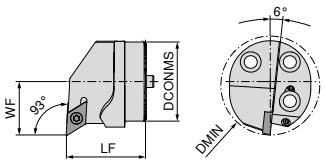
MaxiChange-S – SDUC 93° – Exchangeable cutting head with screw clamping





Illustrations show right-hand versions

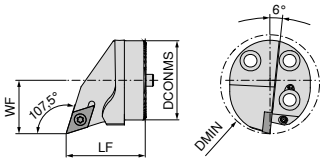
DCONMS	LF	DMIN	WF	torque moment	Insert	NEW Left-hand	NEW Right-hand
mm	mm	mm	mm	Nm		84 143 ...	84 144 ...
16	20	20	11	0.9	DC.. 0702	**01600**	**01600**
20	20	25	13	3	DC.. 11T3	**02000**	**02000**
25	35	32	17	3	DC.. 11T3	**02500**	**02500**
32	35	40	22	3	DC.. 11T3	**03200**	**03200**
40	40	50	27	3	DC.. 11T3	**04000**	**04000**

Clamping screw

84 950 ...

Spare parts for Article no.	
84 144 02500 / 84 143 02500	**27600**
84 144 03200 / 84 143 03200	**27600**
84 144 04000 / 84 143 04000	**27600**

MaxiChange-S – SDQC 107.5° – Exchangeable cutting head with screw clamping



Illustrations show right-hand versions

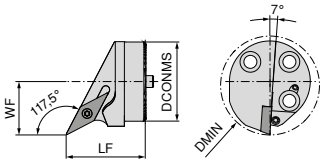
DCONMS mm	LF mm	DMIN mm	WF mm	torque moment Nm	Insert	NEW Left-hand 84 145 ...	NEW Right-hand 84 146 ...
20	20	25	13	3	DC.. 11T3	**02000**	**02000**
25	35	32	17	3	DC.. 11T3	**02500**	**02500**
32	35	40	22	3	DC.. 11T3	**03200**	**03200**
40	40	50	27	3	DC.. 11T3	**04000**	**04000**

Clamping screw

84 950 ...

Spare parts for Article no.	
84 146 02500 / 84 145 02500	**27600**
84 146 03200 / 84 145 03200	**27600**
84 146 04000 / 84 145 04000	**27600**

MaxiChange-S – SVPC 117.5° – Exchangeable cutting head with screw clamping



Illustrations show right-hand versions

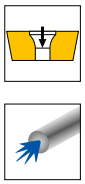
DCONMS mm	LF mm	DMIN mm	WF mm	torque moment Nm	Insert	NEW Left-hand 84 176 ...	NEW Right-hand 84 176 ...
25	35	32	17	3	VC.. 1103	**12500**	**02500**
32	35	40	22	3	VC.. 1604	**13200**	**03200**
40	40	50	27	3	VC.. 1604	**14000**	**04000**

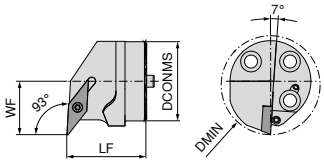
Clamping screw

84 950 ...

Spare parts for Article no.	
84 176 02500 / 84 176 12500	**27600**
84 176 03200 / 84 176 13200	**27600**
84 176 04000 / 84 176 14000	**27600**

MaxiChange-S – SVUC 93° – Exchangeable cutting head with screw clamping





Illustrations show right-hand versions

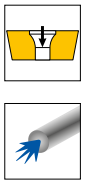
DCONMS	LF	DMIN	WF	torque moment	Insert	NEW Left-hand	NEW Right-hand
mm	mm	mm	mm	Nm		84 177 ...	84 177 ...
20	20	25	13	3	VC.. 1103	**12000**	**02000**
25	35	32	17	3	VC.. 1103	**12500**	**02500**
32	35	40	22	3	VC.. 1604	**13200**	**03200**
40	40	50	27	3	VC.. 1604	**14000**	**04000**

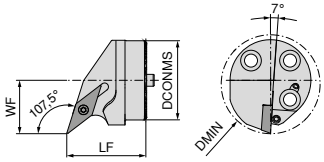
Clamping screw

84 950 ...

Spare parts for Article no.	
84 177 02000 / 84 177 12000	**27600**
84 177 02500 / 84 177 12500	**27600**
84 177 03200 / 84 177 13200	**27600**
84 177 04000 / 84 177 14000	**27600**

MaxiChange-S – SVQC 107.5° – Exchangeable cutting head with screw clamping





Illustrations show right-hand versions

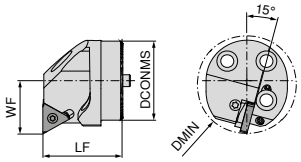
DCONMS	LF	DMIN	WF	torque moment	Insert	NEW Left-hand	NEW Right-hand
mm	mm	mm	mm	Nm		84 178 ...	84 178 ...
20	20	25	13	3	VC.. 1103	**12000**	**02000**
25	35	32	17	3	VC.. 1103	**12500**	**02500**
32	35	40	22	3	VC.. 1604	**13200**	**03200**
40	40	50	27	3	VC.. 1604	**14000**	**04000**

Clamping screw

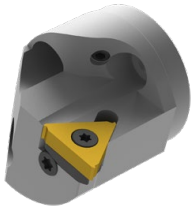
84 950 ...

Spare parts for Article no.	
84 178 02000 / 84 178 12000	**27600**
84 178 02500 / 84 178 12500	**27600**
84 178 03200 / 84 178 13200	**27600**
84 178 04000 / 84 178 14000	**27600**

MaxiChange – Exchangeable cutting head for internal thread



Illustrations show right-hand versions



DCONMS	LF	DMIN	WF	torque moment	Insert	Left-hand	Right-hand
mm	mm	mm	mm	Nm		84 167 ...	84 168 ...
25	35	32	17	2	16 ..	**02500**	**02500**
32	35	40	22	2	16 ..	**03200**	**03200**
40	40	50	27	2	16 ..	**04000**	**04000**

Suitable internal thread inserts can be found in → **Chapter 8 Thread Turning Tools, pages 6-30**

Spare parts for Article no.	Shim		Screw-U		Clamping screw
	84 950 ...		84 950 ...		84 950 ...
84 168 02500	**29500**	UNC5x7.3	**29700**		**29400**
84 167 02500	**29600**	UNC5x7.3	**29700**		**29400**
84 168 03200	**29500**	UNC5x7.3	**29700**		**29400**
84 167 03200	**29600**	UNC5x7.3	**29700**		**29400**
84 168 04000	**29500**	UNC5x7.3	**29700**		**29400**
84 167 04000	**29600**	UNC5x7.3	**29700**		**29400**

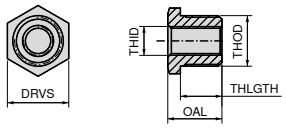
Flexible coolant hoses

▲ incl. prefitted quick-coupler and coupler connector
▲ extremely flexible
▲ pressure-resistant up to 300 bar

72 990 ...

Designation	BD mm	CND mm	OAL mm	
MU.KSS-DN3-150	6.0	3	150	11005
MU.KSS-DN3-250	6.0	3	250	11006
MU.KSS-DN5-200	9.5	5	200	11001
MU.KSS-DN5-300	9.5	5	300	11002
MU.KSS-DN5-400	9.5	5	400	11003
MU.KSS-DN5-500	9.5	5	500	11004

Threaded adapter

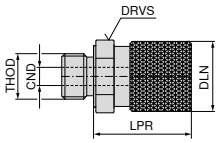


72 988 ...

THID	THOD	THLGTH mm	DRVS mm	OAL mm	
G1/8"	G1/4"	11.5	17	15.0	01005
G1/8"	M8x1	11.5	14	15.0	01006
G1/8"	M12x1	11.5	14	15.0	01007
G1/8"	M14x1	11.5	17	15.0	01008
M8x1	G1/4"	11.5	17	15.0	01003
M8x1	M12x1	11.5	14	15.0	01001
M8x1	M14x1	11.5	17	15.0	01002
M8x1	G1/8"	11.5	14	23.5	01004

Quick-coupler

▲ pressure-resistant up to at least 400 bar
▲ rapid change of coolant distribution without screws thanks to click system

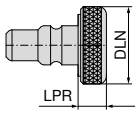


72 993 ...

THOD	BD mm	DLN mm	LPR mm	CND mm	DRVS mm	
G1/8"	16	15.5	21.5	4	14	15001

Sealing plugs

▲ for closing off the quick-coupler to protect against contamination

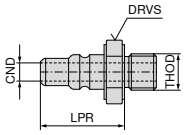


72 994 ...

Designation	LPR mm	DLN mm	
MU.KSVS	5.5	15.5	17001

Coupler connector

▲ pressure-resistant up to at least 400 bar



72 992 ...

Designation	LPR mm	CND mm	DRVS mm	OAL mm	
MU.KSKS-M8x1	18.5	4	12	19	13001

G1/8” screw plug

▲ Max. 200 bar/2900 psi
▲ No sealing ring required

72 950 ...

Designation	THSZMS	
VS.G1/8	G1/8"	010

Angled coolant connection for distributor

72 987 ...

Designation	THOD	THID	
MU.KS-KA-KSV	G1/8"	G1/8"	18003

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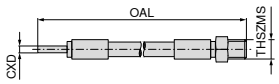
Hose (connecting piece/thread)

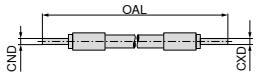
▲ Max. 200 bar/2900 psi
▲ No sealing ring required



Designation	THSZMS	CXD mm	OAL mm	72 305 ...
HDKS.150.M5-4	M5	4	150	010
HDKS.200.M5-4	M5	4	200	021
HDKS.300.M5-4	M5	4	300	033
HDKS.500.M5-4	M5	4	500	045

Hose (connecting piece/connecting piece)

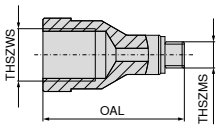
▲ Max. 200 bar/2900 psi



Designation	CND mm	CXD mm	OAL mm	72 305 ...
HDKS.150.4-4	4	4	150	003
HDKS.200.4-4	4	4	200	014
HDKS.300.4-4	4	4	300	025
HDKS.500.4-4	4	4	500	037

Reducer fitting

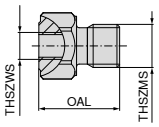
▲ Max. 200 bar/2900 psi
▲ Includes sealing ring



Designation	THSZWS	THSZMS	OAL mm	72 301 ...
RV.100.M5-M6	M6	M5	15	001
RV.100.M5-M8x1	M8x1	M5	23	003
RV.100.M5-M10x1	M10x1	M5	27	005
RV.100.M5-G1/8	G1/8"	M5	27	004

Reducer fitting

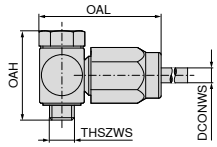
▲ Max. 200 bar/2900 psi
▲ No sealing ring required



Designation	THSZWS	THSZMS	OAL mm	72 301 ...
RV.100.M6-M5	M5	M6	18	002
RV.100.M8x1-M5	M5	M8x1	15	008
RV.100.M10x1-M5	M5	M10x1	15	007
RV.100.G1/8-M5	M5	G1/8"	15	006

Swivel fitting

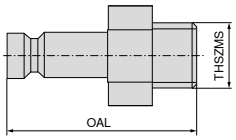
▲ Max. 200 bar/2900 psi



Designation	DCONWS mm	OAH mm	THSZMS	OAL mm	72 307 ...
KA.SV.M5-4	4	21	M5	28	017
KA.SV.G1/8-4	4	30	G1/8"	37	012

Quick connection (connector)

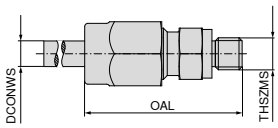
▲ Max. 200 bar/2900 psi
▲ No sealing ring required

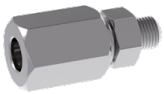


Designation	THSZMS	OAL mm	72 320 ...
SAG.M5	M5	20	001

Straight fitting

▲ Max. 200 bar/2900 psi

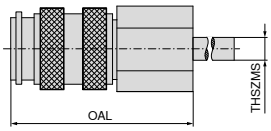




Designation	DCONWS mm	THSZMS	OAL mm	72 307 ...
KA. M5-4	4	M5	27	009
KA. G1/8-4	4	G1/8"	32	003

Quick connection (coupling)

▲ Max. 200 bar/2900 psi



Designation	THSZMS	OAL mm	72 319 ...
KIG.M5	M5	26	001

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Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment		Tensile strength lbf/in²* / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0.15 % C	Annealed	60900 lbf/in² / 125 HB	1.0401	1015	1.0301	1010
		P.1.2	< 0.45 % C	Annealed	92800 lbf/in² / 190 HB	1.1191	1045	1.0737	12L14
		P.1.3		Tempered	121800 lbf/in² / 250 HB	1.1191	1045	1.0503	1043
		P.1.4	< 0.75 % C	Annealed	132000 lbf/in² / 270 HB	1.1223	1060	1.0535	1055
		P.1.5		Tempered	146500 lbf/in² / 300 HB	1.1223	1060	1.1274	1095
	Low-alloy steel	P.2.1		Annealed	88500 lbf/in² / 180 HB	1.7131	5115	1.6523	8620
		P.2.2		Tempered	134900 lbf/in² / 275 HB	1.7131	5115	1.6582	4340
		P.2.3		Tempered	146500 lbf/in² / 300 HB	1.7225	4142	1.7131	5115
		P.2.4		Tempered	174000 lbf/in² / 375 HB	1.7225	4142	17223	4140
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	98600 lbf/in² / 200 HB	1.4021	420	1.2379	D2
		P.3.2		Hardened and tempered	159500 lbf/in² / 300 HB	1.2343	H11	1.3343	M2
		P.3.3		Hardened and tempered	188500 lbf/in² / 400 HB	1.2343	H11	1.2363	A2
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	98600 lbf/in² / 200 HB	1.4016	430	1.4125	440C
		P.4.2	Martensitic	Tempered	117500 lbf/in² / 250 HB	1.4112	S44003	1.4021	420
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	88500 lbf/in² / 200 HB	1.4301	304	1.4401	316
		M.2.1	Austenitic	Tempered	300 HB	1.4841	314	1.4568	17-7 PH
		M.3.1	Austenitic / ferritic (Duplex)		113100 lbf/in² / 230 HB	1.4462	S32205	1.4410	S32750
K	Grey cast iron	K.1.1	Pearlitic / ferritic		88500 lbf/in² / 180 HB	0.6010	A48-20B	0.6025	A48-40 B
		K.1.2	Pearlitic (martensitic)		127600 lbf/in² / 260 HB	0.6030	A48-45B	0.6040	A48-60 B
	Spherulitic graphite cast iron	K.2.1	Ferritic		78300 lbf/in² / 160 HB	0.7040	60-40-18	0.7050	65-45-12
		K.2.2	Pearlitic		122600 lbf/in² / 250 HB	0.7070	100-70-03	0.7660	A439 Type D2
	Malleable iron	K.3.1	Ferritic		63800 lbf/in² / 130 HB	0.8035	GTW-35-04		
		K.3.2	Pearlitic		113100 lbf/in² / 230 HB	0.8170	70003		
N	Aluminium wrought alloy	N.1.1	Non-hardenable		60 HB	3.0255	A91060	3.0255	A91060
		N.1.2	Hardenable		49300 lbf/in² / 100 HB	3.1355	2024	3.1355	2024
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		36300 lbf/in² / 75 HB	3.2581	A04130 / A413-0	3.2581	A04130 / A413-0
		N.2.2	≤ 12 % Si, hardenable		43500 lbf/in² / 90 HB	3.2134	G-AlSi5Cu1Mg		
		N.2.3	> 12 % Si, non-hardenable		63800 lbf/in² / 130 HB		G-AlSi17Cu4Mg		
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		54400 lbf/in² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0380	C37700
		N.3.2	CuZn, CuSnZn		43500 lbf/in² / 90 HB	2.0331	CuZn15	2.0331	C34000
		N.3.3	CuSn, lead-free copper and electrolytic copper		49300 lbf/in² / 100 HB	2.0060	E-Cu57		
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys		70 HB	3.5612	MgAl6Zn		
S	Heat-resistant alloys	S.1.1	Fe - basis	Annealed	98600 lbf/in² / 200 HB	1.4864	X12NiCrSi 36-16	1.4864	330
		S.1.2			137800 lbf/in² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4980	S66286
		S.2.1	Ni or Co basis	Annealed	121800 lbf/in² / 250 HB	2.4856	Inconel 625	2.4812	Hastelloy C
		S.2.2			171100 lbf/in² / 350 HB	2.4952	Nimonic 80A	2.4668	Inconel 718
		S.2.3		Cast	156600 lbf/in² / 320 HB	2.4674	Nimocast PK24	2.4670	Nimocast 713
	Titanium alloys	S.3.1	Pure titanium		5800 lbf/in²	3.7025	Ti99,8		
		S.3.2	Alpha + beta alloys		152300 lbf/in²	3.7165	TiAl6V4		
		S.3.3	Beta alloys		203100 lbf/in² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr		
H	Hardened steel	H.1.1		Hardened and tempered	46-55 HRC				
		H.1.2		Hardened and tempered	56-60 HRC				
		H.1.3		Hardened and tempered	61-65 HRC				
		H.1.4		Hardened and tempered	66-70 HRC				
	Chilled iron	H.2.1		Cast	400 HB				
	Hardened cast iron	H.3.1		Hardened and tempered	55 HRC				
O	Non-metal materials	O.1.1	Plastics, duroplastic		≤ 21800 lbf/in²				
		O.1.2	Plastics, thermoplastic		≤ 14500 lbf/in²				
		O.2.1	Aramid fibre-reinforced		≤ 145000 lbf/in²				
		O.2.2	Glass/carbon-fibre reinforced		≤ 145000 lbf/in²				
		O.3.1	Graphite						

*** Tensile Strength at Rupture (Rm)**

Cutting data standard values

Index			DRAGONSKIN													
	TCM407	TCM10	CTEP110	CTCP115-P	CTCP125-P	CTCP135-P	CTCK110	CTCK120	CTPM125	CTCM120	CTCM130	CTPX710 -F05 -F34 -M34 -M42	CTPX710 -25P -25Q	CTPX715 -27 -29	H210T	H10T H216T
	v_c in ft/min															
P.1.1	1250	1020	1530	1220	970	690	1300	1080	670	750	610	1070	1120	910		
P.1.2	1080	880	1330	1040	830	580	1140	930	560	660	500	940	990	780		
P.1.3	930	750	1150	890	690	480	980	780	470	570	400	830	860	660		
P.1.4	870	700	1090	830	660	450	930	740	440	540	370	790	830	620		
P.1.5	790	640	1000	760	590	400	850	670	390	500	320	730	780	560		
P.2.1	1110	900	1360	1070	860	590	1160	950	580	670	520	960	990	800		
P.2.2	860	690	1070	830	640	430	920	730	430	530	360	780	830	610		
P.2.3	790	640	1000	760	590	400	850	670	390	500	320	730	780	560		
P.2.4	600	480	770	560	430	280	660	490	270	380	200	580	630	410		
P.3.1	930	720	1140	660	560	500	900	730	470	520	410	460	500	450		
P.3.2	740	550	920	460	350	310	740	580	320	380	270	280	310	270		
P.3.3	550	380	700	280	130	120	590	430	170	240	130	100	120	80		
P.4.1	930	720	1140	660	560	510			470	520	410	460	510	450		
P.4.2	830	640	1030	560	450	410			390	450	340	370	430	360		
M.1.1	930	720	1140			510			470	520	410	460	500	450		
M.2.1						310			320	380	270	280	300	270		
M.3.1						450			420	480	370	410	430	400		
K.1.1			1350	840	560		1320	910						660	560	460
K.1.2			1020	780	530		1020	870						530	430	380
K.2.1	1170	860	1450	890	590		1060	960						630	590	500
K.2.2	1040	710	1160	680	530		910	760						500	430	360
K.3.1	1070	990	1370	830	660		1020	910						690	630	560
K.3.2	830	680	830	690	530		870	760						590	530	460
N.1.1												6070	6070	5780	5450	4620
N.1.2												5280	5280	4950	4460	3630
N.2.1												4130	4130	3960	3960	3140
N.2.2												4130	4130	3960	3630	3140
N.2.3												2480	2480	2310	1980	1650
N.3.1												2150	2150	2060	1730	1400
N.3.2												2080	2080	1980	1650	1320
N.3.3												1650	1650	1570	1240	910
N.4.1												1120	1120	1070	910	740
S.1.1											115	330	365	130	140	
S.1.2											85	265	280	100	110	
S.2.1											65	210	250	100	110	
S.2.2											65	130	150	80	80	
S.2.3											60	125	140	65	65	
S.3.1											365	315	330	365	365	
S.3.2											210	180	200	230	230	
S.3.3											150	130	150	165	165	
H.1.1																
H.1.2																
H.1.3																
H.1.4																
H.2.1																
H.3.1																
O.1.1														460	530	430
O.1.2																
O.2.1														495	460	350
O.2.2																
O.3.1																

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. **±20%** according to the usage conditions.

Cutting data standard values

Index			DRAGONSKIN														
	TCM407	TCM10	CTEP110	CTCP115-P	CTCP125-P	CTCP135-P	CTCK110	CTCK120	CTPM125	CTCM120	CTCM130	CTPX710 -F05 -F34 -M34 -M42	CTPX710 -25P -25Q	CTPX715 -27 -29	H210T	H10T H216T
	v_c in m/min															
P.1.1	380	310	460	370	295	210	395	330	200	230	185	325	340	275		
P.1.2	330	265	400	315	250	175	345	280	170	200	150	290	300	235		
P.1.3	280	230	350	270	210	145	300	240	140	175	125	250	260	200		
P.1.4	265	210	330	250	200	135	280	220	130	165	115	240	250	190		
P.1.5	240	190	300	230	180	120	260	200	120	150	100	220	235	170		
P.2.1	335	270	410	325	260	180	350	290	175	200	160	290	300	240		
P.2.2	260	210	325	250	195	130	280	220	130	160	110	235	250	185		
P.2.3	240	190	300	230	180	120	260	200	120	150	100	220	235	170		
P.2.4	180	145	230	170	130	85	200	150	80	115	60	175	190	125		
P.3.1	280	220	345	200	170	150	270	220	140	160	125	140	150	140		
P.3.2	225	170	280	140	105	95	225	175	100	115	80	85	95	80		
P.3.3	170	115	210	85	40	35	180	130	50	75	40	30	35	25		
P.4.1	280	220	345	200	170	155			140	160	125	140	155	140		
P.4.2	250	195	310	170	135	125			120	140	100	115	130	110		
M.1.1	280	220	345			155			140	160	125	140	150	140		
M.2.1						95			100	115	80	85	90	80		
M.3.1						135			130	150	110	125	130	120		
K.1.1			410	255	170		400	275						200	170	140
K.1.2			310	235	160		310	265						160	130	115
K.2.1	355	260	440	270	180		320	290						190	180	150
K.2.2	315	215	350	205	160		275	230						150	130	110
K.3.1	325	300	415	250	200		310	275						210	190	170
K.3.2	250	205	250	210	160		265	230						180	160	140
N.1.1												1840	1840	1750	1650	1400
N.1.2												1600	1600	1500	1350	1100
N.2.1												1250	1250	1200	1200	950
N.2.2												1250	1250	1200	1100	950
N.2.3												750	750	700	600	500
N.3.1												650	650	625	525	425
N.3.2												630	630	600	500	400
N.3.3												500	500	475	375	275
N.4.1												340	340	325	275	225
S.1.1											35	100	110	40	45	
S.1.2											25	80	85	30	35	
S.2.1											20	65	75	30	35	
S.2.2											20	40	45	25	25	
S.2.3											20	40	45	20	20	
S.3.1											110	95	100	110	110	
S.3.2											65	55	60	70	70	
S.3.3											45	40	45	50	50	
H.1.1																
H.1.2																
H.1.3																
H.1.4																
H.2.1																
H.3.1																
O.1.1														140	160	130
O.1.2																
O.2.1														150	140	105
O.2.2																
O.3.1																

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Machinability of non-ferrous metals with carbide indexable inserts

	Material group	Material examples			Machinability of aluminium alloys *	Comments
N	Pure aluminium	non hardenable	Al 99.5	W7	5	▲ Snarl chips ▲ Possibly bad surface ▲ Excessive built-up edge ▲ Long tool life ▲ Use coolant emulsion
			Al 99.5	F13	4	
			Al 99	W8	5	
			Al 99	F14	4	
	Aluminium wrought alloys	non hardenable	Al Mn	W10	5	▲ Snarl, continuous or fragmented chip ▲ Large feed rates necessary for good chip control ▲ Built-up edge ▲ Long tool life ▲ Emulsion coolant is advantageous
			Al Mn	F16	4	
			Al Mg 1	W10	5	
			Al Mg 1	F19	4	
			Al Mg 3	W18	4	
			Al Mg 3	F25	3	
			Al Mg 5	W25	4	
			AL Mg 5	F28	2	
			Al Mg 4.5 Mn	W27	4	
			Al Mg 4.5 Mn	G35	3	
		hardenable	Al Mg Si 0.5	W	4	▲ Good chip control with higher feed rates
			Al Mg Si 0.5	F13-25	3	
			Al Mg Si 1	W	4	
			Al Mg Si 1	F21-30	3	
			Al Mg Si Pb	F20-28	2	▲ Very good chip control ▲ No built up edge ▲ Very good surface quality
			Al Cu Si Pb	F28-37	1	
			Al Cu Mg Pb	F34-37	1	
			Al Cu Mg 1	W	3	▲ Good chip control ▲ Good surface quality ▲ Little built-up edge
			Al Cu Mg 1	F33-40	2	
			Al Cu Mg 2	W	3	
			Al Cu Mg 2	F40-47	2	
			Al Cu Si Mn	W	3	
			Al Cu Si Mn	F43-46	2	
			Al Zn Mg Cu 1.5	F50-52	2	
			Al Sn 6 Cu		1	
	Cast Aluminium Alloys	non hardenable	G-Al Si 12		3	▲ Good chip control ▲ Built-up edge ▲ Higher Si content results in lower tool life
			G-Al Si 10 Mg		3	
			G-Al Si 5 Mg		2	
			G-Al Si 7 Mg (9 Mg)		2	
			G-Al Si Cu 3		2	▲ High wear of the carbide
			G-Al Si 6 Cu 4		2	
			G-Al Mg 3 (Mg 5)		2	▲ Good chip control ▲ Good surface quality ▲ Long tool life
			G-Al Mg 9		2	
			G-Al Mg 10		2	
			G-Al Mg 3 Si (5 Si)		2	
			G-Al Cu 4 Ti (Mg)		2	
			G-Al Si 12 Cu Mg Ni		2	
	Copper wrought alloys		Cu Ag			
			Cu As			
			Cu Cd			
			Cu Cd Sn			
			Cu Mg			
			Cu Mn			
		brass	Cu Zn Al			
		bronze	Cu Sn			
			Cu Sn Zn			
			Cu Ni			
			Cu Ni Fe			
			Cu Al			
O	Non metal materials	Duroplastics				
		Fibre-reinforced plastics				
		hard rubber				

* 1 = good machinability, 5 = bad machinability

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Cutting data standard values for negative PCBN inserts

Index	Material	Strength	Cutting edges code negative insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 1000C EN-F 1.6–6.4 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth	●		660	0.002–0.006	0.002–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.2		56–60 HRC	x	Smooth	●		725	0.002–0.006	0.002–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.3		61–65 HRC	x	Smooth	●		725	0.002–0.006	0.002–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.4		66–70 HRC	x	Smooth	●		800	0.002–0.006	0.002–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.2.1	Chilled iron	400 HB	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					
H.3.1	Hardened cast iron	55 HRC	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					

Index	Material	Strength	Cutting edges code negative insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 2000C EN-F 1.6–6.4 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth	●		525	0.002–0.006	0.004–0.02
			x	Interrupted	●		525	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.2		56–60 HRC	x	Smooth	●		600	0.002–0.006	0.004–0.02
			x	Interrupted	●		600	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.3		61–65 HRC	x	Smooth	●		600	0.002–0.006	0.004–0.02
			x	Interrupted	●		600	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.4		66–70 HRC	x	Smooth	●		660	0.002–0.006	0.004–0.02
			x	Interrupted	●		660	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.2.1	Chilled iron	400 HB	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					
H.3.1	Hardened cast iron	55 HRC	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					

Index	Material	Strength	Cutting edges code negative insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 3000C SN-014D-F 1.0–3.2 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth		○	600	0.002–0.006	0.004–0.02
			x	Interrupted	●		600	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		600	0.002–0.006	0.004–0.02
H.1.2		56–60 HRC	x	Smooth		○	660	0.002–0.006	0.004–0.02
			x	Interrupted	●		660	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		660	0.002–0.006	0.004–0.02
H.1.3		61–65 HRC	x	Smooth		○	660	0.002–0.006	0.004–0.02
			x	Interrupted	●		660	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		660	0.002–0.006	0.004–0.02
H.1.4		66–70 HRC	x	Smooth		○	725	0.002–0.006	0.004–0.02
			x	Interrupted	●		725	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		725	0.002–0.006	0.004–0.02
H.2.1	Chilled iron	400 HB	x	Smooth		○	660	0.003–0.006	0.004–0.016
			x	Interrupted		○	600	0.002–0.005	0.004–0.016
			x	Extremely interrupted		○	525	0.002–0.005	0.004–0.016
H.3.1	Hardened cast iron	55 HRC	x	Smooth		○	660	0.003-0.006	0.004-0.016
			x	Interrupted		○	600	0.002–0.005	0.004–0.016
			x	Extremely interrupted		○	525	0.002–0.005	0.004–0.016

With our PCBN indexable inserts, we recommend dry machining – information about this can be found in our **HardCut – PCBN Selection brochure**

* Note chamfer width: The wider the chamfer, the more stable the cutting edge.

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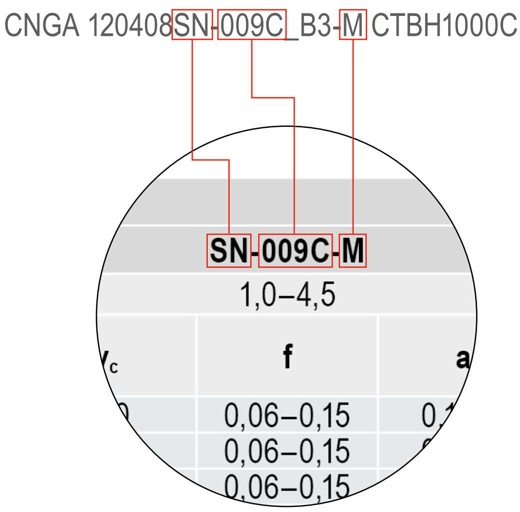
CTBH 1000C					
SN-009C-M			SN-014D-R		
1.0–3.2			0.5–1.6		
v_c	f	a_p	v_c	f	a_p
660	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
725	0.002–0.006	0.004–0.02	660	0.002–0.01	0.005–0.02
725	0.002–0.006	0.004–0.02	660	0.002–0.01	0.005–0.02
725	0.002–0.006	0.004–0.02	660	0.002–0.01	0.005–0.02
725	0.002–0.02	0.004–0.02	660	0.002–0.01	0.005–0.02
800	0.002–0.006	0.004–0.02	725	0.002–0.01	0.005–0.02
800	0.002–0.006	0.004–0.02	725	0.002–0.01	0.005–0.02

CTBH 2000C					
SN-009C-M			SN-014D-R		
1.0–4.5			0.8–3.0		
v_c	f	a_p	v_c	f	a_p
525	0.002–0.006	0.004–0.02	460	0.002–0.01	0.005–0.02
525	0.002–0.006	0.004–0.02	460	0.002–0.01	0.005–0.02
525	0.002–0.006	0.004–0.02	460	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02

CTBH 3000C					
SN-018E-M			SN-020G-R		
1.6–3.2			0.8–3.0		
v_c	f	a_p	v_c	f	a_p
500	0.002–0.01	0.004–0.02	500	0.003-0.016	0.006-0.02
500	0.002–0.01	0.004–0.02	500	0.003-0.016	0.006-0.02
500	0.002–0.01	0.004–0.02	500	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
560	0.002–0.01	0.004–0.02	560	0.003-0.016	0.006-0.02
625	0.002–0.01	0.004–0.02	625	0.003-0.016	0.006-0.02
625	0.002–0.01	0.004–0.02	625	0.003-0.016	0.006-0.02
625	0.002–0.01	0.004–0.02	625	0.003-0.016	0.006-0.02
600	0.003-0.008	0.004–0.02	600	0.003-0.008	0.006-0.02
525	0.003-0.006	0.004–0.02	525	0.003-0.006	0.006-0.02
460	0.003-0.006	0.004–0.02	460	0.003-0.006	0.006-0.02
600	0.003-0.008	0.004–0.02	600	0.003-0.008	0.006-0.02
525	0.003-0.006	0.004–0.02	525	0.003-0.006	0.006-0.02
460	0.003-0.006	0.004–0.02	460	0.003-0.006	0.006-0.02



Cutting data standard values for positive PCBN inserts

Index	Material	Strength	Cutting edges code positive insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 1000C EN-F 1.6–6.4 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth	●		750	0.002–0.006	0.004–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.2		56–60 HRC	x	Smooth	●		825	0.002–0.006	0.004–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.3		61–65 HRC	x	Smooth	●		825	0.002–0.006	0.004–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.1.4		66–70 HRC	x	Smooth	●		890	0.002–0.006	0.004–0.02
			x	Interrupted		○			
			x	Extremely interrupted					
H.2.1	Chilled iron	400 HB	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					
H.3.1	Hardened cast iron	55 HRC	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					

Index	Material	Strength	Cutting edges code positive insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 2000C EN-F 1.6–6.4 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth	●		600	0.002–0.006	0.004–0.02
			x	Interrupted	●		594	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.2		56–60 HRC	x	Smooth	●		700	0.002–0.006	0.004–0.02
			x	Interrupted	●		693	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.3		61–65 HRC	x	Smooth	●		700	0.002–0.006	0.004–0.02
			x	Interrupted	●		700	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.1.4		66–70 HRC	x	Smooth	●		750	0.002–0.006	0.004–0.02
			x	Interrupted	●		750	0.002–0.006	0.004–0.02
			x	Extremely interrupted		○			
H.2.1	Chilled iron	400 HB	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					
H.3.1	Hardened cast iron	55 HRC	x	Smooth					
			x	Interrupted					
			x	Extremely interrupted					

Index	Material	Strength	Cutting edges code positive insert* Ra (theo.)	Cutting condition	Main Application	Extended application	CTBH 3000C SN-014D-F 1.0–3.2 v_c	f	a_p
H.1.1	Hardened steel	46–55 HRC	x	Smooth		○	700	0.002–0.006	0.004–0.02
			x	Interrupted	●		600	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		600	0.002–0.006	0.004–0.02
H.1.2		56–60 HRC	x	Smooth		○	750	0.002–0.006	0.004–0.02
			x	Interrupted	●		660	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		660	0.002–0.006	0.004–0.02
H.1.3		61–65 HRC	x	Smooth		○	660	0.002–0.006	0.004–0.02
			x	Interrupted	●		660	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		660	0.002–0.006	0.004–0.02
H.1.4		66–70 HRC	x	Smooth		○	825	0.002–0.006	0.004–0.02
			x	Interrupted	●		725	0.002–0.006	0.004–0.02
			x	Extremely interrupted	●		725	0.002–0.006	0.004–0.02
H.2.1	Chilled iron	400 HB	x	Smooth		○	759	0.003-0.006	0.004–0.02
			x	Interrupted		○	700	0.002–0.005	0.004–0.02
			x	Extremely interrupted		○	600	0.002–0.005	0.004–0.02
H.3.1	Hardened cast iron	55 HRC	x	Smooth		○	750	0.003-0.006	0.004–0.02
			x	Interrupted		○	700	0.002–0.005	0.004–0.02
			x	Extremely interrupted		○	600	0.002–0.005	0.004–0.02

With our PCBN indexable inserts, we recommend dry machining – information about this can be found in our **HardCut – PCBN Selection brochure**

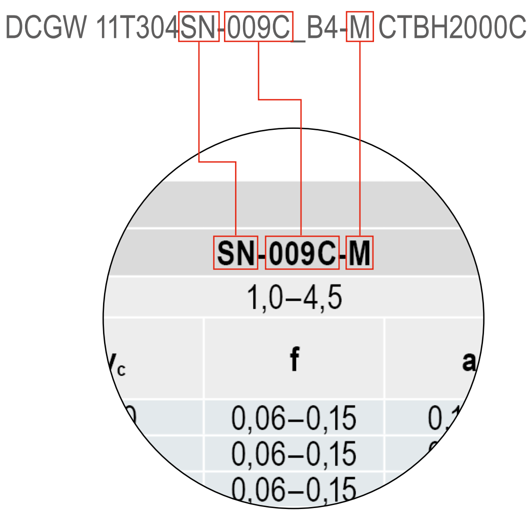
* Note chamfer width: The wider the chamfer, the more stable the cutting edge.

The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. **±20%** according to the usage conditions.

CTBH 1000C					
SN-009C-M			SN-014D-R		
1.0–3.2			0.5–1.6		
v_c	f	a_p	v_c	f	a_p
760	0.002–0.006	0.004–0.02	700	0.002–0.01	0.005–0.02
760	0.002–0.006	0.004–0.02	700	0.002–0.01	0.005–0.02
825	0.002–0.006	0.004–0.02	760	0.002–0.01	0.005–0.02
825	0.002–0.006	0.004–0.02	760	0.002–0.01	0.005–0.02
825	0.002–0.006	0.004–0.02	760	0.002–0.01	0.005–0.02
825	0.002–0.006	0.004–0.02	760	0.002–0.01	0.005–0.02
890	0.002–0.006	0.004–0.02	825	0.002–0.01	0.005–0.02
890	0.002–0.006	0.004–0.02	825	0.002–0.01	0.005–0.02

CTBH 2000C					
SN-009C-M			SN-014D-R		
1.0–4.5			0.8–3.0		
v_c	f	a_p	v_c	f	a_p
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	525	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
600	0.002–0.006	0.004–0.02	600	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	700	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	700	0.002–0.01	0.005–0.02
660	0.002–0.006	0.004–0.02	700	0.002–0.01	0.005–0.02

CTBH 3000C					
SN-018E-M			SN-020G-R		
1.6–3.2			0.8–3.0		
v_c	f	a_p	v_c	f	a_p
560	0.002–0.01	0.004–0.02	560	0.003–0.016	0.006–0.02
560	0.002–0.01	0.004–0.02	560	0.003–0.016	0.006–0.02
560	0.002–0.01	0.004–0.02	560	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
640	0.002–0.01	0.004–0.02	645	0.003–0.016	0.006–0.02
725	0.002–0.01	0.004–0.02	725	0.003–0.016	0.006–0.02
725	0.002–0.01	0.004–0.02	725	0.003–0.016	0.006–0.02
725	0.002–0.01	0.004–0.02	725	0.003–0.016	0.006–0.02
700	0.003–0.008	0.004–0.02	700	0.003–0.008	0.006–0.02
600	0.003–0.006	0.004–0.02	600	0.003–0.006	0.006–0.02
525	0.003–0.006	0.004–0.02	525	0.003–0.006	0.006–0.02
700	0.003–0.008	0.004–0.02	700	0.003–0.008	0.006–0.02
600	0.003–0.006	0.004–0.02	600	0.003–0.006	0.006–0.02
525	0.003–0.006	0.004–0.02	525	0.003–0.006	0.006–0.02



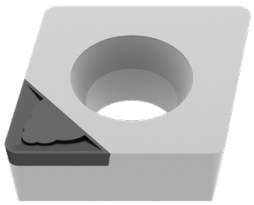
Cutting data standard values for diamond cutting materials CTD PD20 / PS30 / PU20 / CD10 / MD05

Index	Material group			a_p = 0.0015“–0.016“ Surface roughness R_z in µm 2.5–5.0	a_p = 0.0015“–0.016“ Surface roughness R_z in µm 5.0–10	a_p = 0.0016“–0.040“ Surface roughness R_z in µm 2.5–5.0	a_p = 0.0016“–0.040“ Surface roughness R_z in µm 5.0–10	a_p = 0.0016“–0.100“ Surface roughness R_z in µm 2.5–5.0	a_p = 0.0016“–0.100“ Surface roughness R_z in µm 5.0–10
				CTD ...	CTD ...	CTD ...	CTD ...	CTD ...	CTD ...
N.1.1 N.1.2	Aluminium wrought alloys without Si f=0.002–0.020 inch/rev.	○	Tool Material	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05
			v_c in ft/min	**1300–8250**	**1300–8250**	**1300–6600**	**1300–6600**	**1300–5300**	**1300–5300**
		◐	Tool Material		PD20 / CD10		PD20 / CD10		PD20 / CD10
			v_c in ft/min		**1300–8250**		**1300–6600**		**1300–5300**
		◌	Tool Material	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20
			v_c in ft/min	**1300–8250**	**1300–8250**	**1300–6600**	**1300–6600**	**1300–5300**	**1300–5300**
N.2.1	Cast Aluminium Alloys Si≤12 % – hardened or Si=12–20% – non hardened f=0.002–0.020 inch/rev.	○	Tool Material	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05
			v_c in ft/min	**2000–6600**	**2000–7000**	**2000–6000**	**2000–6600**	**2000–5000**	**2000–6000**
		◐	Tool Material	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
			v_c in ft/min	**1300–6600**	**1300–7000**	**1300–6000**	**2000–6600**	**1000–5000**	**1300–6000**
		◌	Tool Material	PS30	PS30	PS30	PS30	PS30	
			v_c in ft/min	**2000–6600**	**2000–7000**	**2000–6000**	**2000–6600**	**2000–5000**	
N.2.2 N.2.3	Aluminium cast alloys Si=12–20 % f=0.002–0.020 inch/rev.	○	Tool Material	PU20 / CD10 / MD05	PU20 / CD10 / MD05	PU20 / CD10 / MD05	PU20 / CD10 / MD05	PU20 / CD10 / MD05	PU20 / CD10 / MD05
			v_c in ft/min	**2600–4000**	**1300–6000**	**2300–3300**	**1000–5000**	**2000–3000**	**1200–4000**
		◐	Tool Material		PU20 / CD10		PU20 / CD10		PU20 / CD10
			v_c in ft/min		**2000–6000**		**2000–5000**		**2000–4000**
		◌	Tool Material		PU20		PU20		
			v_c in ft/min		**2000–6000**		**2000–5000**		
N.3.1 N.3.2 N.3.3	Copper and copper wrought alloys f=0.002–0.020 inch/rev.	○	Tool Material	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05	PD20 / PU20 / CD10 / MD05
			v_c in ft/min	**1300–6000**	**1000–5200**	**1300–5300**	**1000–5000**	**1300–4600**	**1300–5300**
		◐	Tool Material	PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PS30 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10
			v_c in ft/min	**1000–5000**	**1000–5000**	**1300–5300**	**1000–5000**	**1300–5300**	**1000–5000**
		◌	Tool Material		PD20 / PU20		PS30 / PU20	PD20 / PU20	PS30 / PU20
			v_c in ft/min		**1000–6000**		**1000–5700**	**1000–5000**	**650–4300**
O.1.1 O.1.2	Plastic materials without reinforcement (acrylic glass) f=0.002–0.028 inch/rev.	○	Tool Material		PD20 / CD10 / MD05		PD20 / CD10 / MD05		PS30 / CD10 / MD05
			v_c in ft/min		**1200–4000**		**1000–3300**		**650–3300**
		◐	Tool Material		PD20 / CD10		PD20 / CD10		PS30 / CD10
			v_c in ft/min		**1000–4000**		**650–3300**		**650–3000**
		◌	Tool Material		PD20 / CD10		PD20 / CD10		PD20 / CD10
			v_c in ft/min		**1200–4000**		**1000–3300**		**650–3300**
O.2.1 O.2.2	Plastic materials with reinforcement (glass-fibre, carbon-fibre reinforced) f=0.002–0.028 inch/rev.	○	Tool Material	PS30 / PU20 / CD10 / MD05		PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05	PS30 / PU20 / CD10 / MD05
			v_c in ft/min	**1650–3300**		**1200–3000**	**1000–3000**	**1300–5300**	**650–4000**
		◐	Tool Material	PS30 / PU20 / CD10		PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
			v_c in ft/min	**1300–3000**		**1300–5300**	**650–3000**	**650–3000**	**650–4600**
		◌	Tool Material	PU20		PU20	PU20	PU20	
			v_c in ft/min	**1650–3300**		**1300–2600**	**1000–3300**	**1300–5300**	
O.3.1	Graphite		Tool Material	PD20 / PS30 / PU20 / CD10		PD20 / PS30 / PU20 / CD10		PD20 / PS30 / PU20 / CD10	
			v_c in ft/min	**330–11000**		**330–10000**		**330–10000**	

○ Smooth cut | ◐ Irregular cutting depth | ◌ Interrupted cut

Cutting data standard values for the CB chip breaker geometries

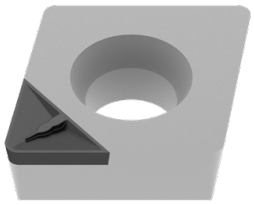
-CB1



3D-Chip Breaker -CB1				
Corner Radius	a_p inch		f_z inch/rev.	
	min.	max.	min.	max.
0.004	0.002	0.012	0.001	0.002
0.008	0.002	0.016	0.001	0.003
0.016	0.004	0.031	0.002	0.006
0.032	0.006	0.039	0.003	0.008
0.064	0.012	0.059	0.005	0.010

- ▲ Finish and Superfinish
- ▲ Extremely sharp cutting edge geometry
- ▲ Depth of Cut a_p: 0.002–0.06 inch
- ▲ Smallest cutting pressure for highest accuracies
- ▲ For machining of thin-walled and unstable workpieces

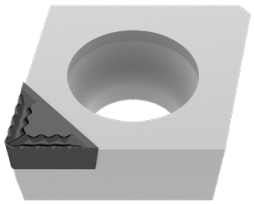
-CB2



3D-Chip Breaker -CB2				
Corner Radius	a_p inch		f_z inch/rev.	
	min.	max.	min.	max.
0.008	0.020	0.031	0.003	0.005
0.016	0.024	0.059	0.003	0.008
0.032	0.028	0.059	0.006	0.012
0.064	0.031	0.079	0.008	0.016

- ▲ Semi-finish and Finish machining
- ▲ Negative edge preperation
- ▲ Cutting Depth a_p: 0.020–0.078 inch
- ▲ High surface quality and tight tolerances
- ▲ Machining of solid workpieces under stable conditions

-CB3



3D-Chip Breaker -CB3				
Corner Radius	a_p inch		f_z inch/rev.	
	min.	max.	min.	max.
0.016	0.039	0.118	0.004	0.008
0.032	0.039	0.118	0.006	0.014

- ▲ Medium and rough machining
- ▲ Highly aggressive chip breaker
- ▲ Cutting depth a_p: 0.04–0.12 inch
- ▲ Stable component conditions necessary
- ▲ Cooling must be ensured

Cutting data standard values for negative inserts

	Designation	-CF20 (Cermet)						-F50					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		inch/rev.			inch			inch/rev.			inch		
	CN.. 321							0.002	**0.006**	0.010	0.008	**0.020**	0.059
	CN.. 322							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	CN.. 431	0.002	**0.006**	0.010	0.012	**0.020**	0.059	0.002	**0.006**	0.010	0.008	**0.024**	0.059
	CN.. 432	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	CN.. 433							0.006	**0.010**	0.014	0.024	**0.055**	0.102
	CN.. 434												
	CN.. 542												
	CN.. 543												
	CN.. 544												
	CN.. 546												
	CN.. 642												
	CN.. 643												
	CN.. 644												
	CN.. 646												
	CN.. 866												
	DN.. 330.5							0.002	**0.004**	0.008	0.004	**0.016**	0.091
	DN.. 331	0.002	**0.006**	0.010	0.012	**0.020**	0.059	0.002	**0.006**	0.010	0.008	**0.024**	0.059
	DN.. 332	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	DN.. 333							0.006	**0.010**	0.014	0.024	**0.055**	0.102
	DN.. 431							0.002	**0.006**	0.010	0.008	**0.024**	0.059
	DN.. 432							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	DN.. 433							0.006	**0.010**	0.014	0.024	**0.055**	0.102
	DN.. 434												
	DN.. 441	0.002	**0.006**	0.010	0.012	**0.020**	0.059	0.002	**0.006**	0.010	0.008	**0.024**	0.059
	DN.. 442	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	DN.. 443	0.004	**0.008**	0.012	0.020	**0.028**	0.059	0.006	**0.010**	0.014	0.024	**0.055**	0.102
	DN.. 444												
	SN.. 332							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	SN.. 431							0.002	**0.006**	0.010	0.008	**0.024**	0.059
	SN.. 432							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	SN.. 433							0.006	**0.010**	0.014	0.024	**0.055**	0.102
	SN.. 434												
	SN.. 442												
	SN.. 443												
	SN.. 444												
	SN.. 543												
	SN.. 544												
	SN.. 546												
	SN.. 856												
	SN.. 866												
	TN.. 221							0.002	**0.006**	0.010	0.008	**0.024**	0.059
	TN.. 222							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	TN.. 331	0.002	**0.006**	0.010	0.012	**0.020**	0.059	0.002	**0.006**	0.010	0.008	**0.024**	0.059
	TN.. 332	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	TN.. 333	0.004	**0.008**	0.012	0.020	**0.028**	0.059	0.006	**0.010**	0.014	0.024	**0.055**	0.102
	TN.. 431												
	TN.. 432												
	TN.. 433												
	TN.. 434												
	VN.. 331							0.002	**0.006**	0.010	0.008	**0.024**	0.059
	VN.. 332							0.004	**0.008**	0.012	0.016	**0.039**	0.079
	VN.. 333												
	WN.. 331	0.002	**0.006**	0.010	0.012	**0.020**	0.059	0.002	**0.006**	0.010	0.008	**0.024**	0.059
	WN.. 332	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	WN.. 333												
	WN.. 431							0.002	**0.006**	0.010	0.008	**0.024**	0.059
	WN.. 432	0.003	**0.006**	0.010	0.012	**0.020**	0.059	0.004	**0.008**	0.012	0.016	**0.039**	0.079
	WN.. 433							0.006	**0.010**	0.014	0.024	**0.055**	0.102
	WN.. 434												

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The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-TFQ						-XU						-M50					
	f			a_p			f			a_p			f			a_p		
	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
	inch/rev.			inch			inch/rev.			inch			inch/rev.			inch		
CN.. 321																		
CN.. 322																		
CN.. 431	0.004	**0.006**	0.014	0.016	**0.039**	0.118	0.003	**0.006**	0.010	0.012	**0.059**	0.098	0.004	**0.008**	0.012	0.016	**0.079**	0.197
CN.. 432	0.004	**0.010**	0.020	0.020	**0.059**	0.157	0.005	**0.010**	0.014	0.024	**0.079**	0.118	0.006	**0.010**	0.016	0.024	**0.079**	0.197
CN.. 433	0.006	**0.012**	0.028	0.031	**0.079**	0.197	0.006	**0.012**	0.018	0.035	**0.079**	0.138	0.008	**0.012**	0.020	0.039	**0.079**	0.197
CN.. 434													0.010	**0.016**	0.024	0.055	**0.079**	0.197
CN.. 542													0.006	**0.010**	0.016	0.024	**0.118**	0.315
CN.. 543													0.008	**0.012**	0.020	0.039	**0.118**	0.315
CN.. 544													0.010	**0.016**	0.024	0.055	**0.118**	0.315
CN.. 546																		
CN.. 642																		
CN.. 643																		
CN.. 644																		
CN.. 646																		
CN.. 866																		
DN.. 330.5																		
DN.. 331													0.004	**0.008**	0.012	0.016	**0.059**	0.157
DN.. 332													0.006	**0.010**	0.016	0.024	**0.059**	0.157
DN.. 333													0.008	**0.012**	0.020	0.039	**0.059**	0.157
DN.. 431													0.004	**0.008**	0.012	0.016	**0.079**	0.197
DN.. 432													0.006	**0.010**	0.016	0.024	**0.079**	0.197
DN.. 433													0.008	**0.012**	0.020	0.039	**0.079**	0.197
DN.. 434													0.010	**0.016**	0.024	0.055	**0.079**	0.197
DN.. 441	0.004	**0.006**	0.012	0.016	**0.039**	0.118	0.003	**0.006**	0.010	0.012	**0.059**	0.098	0.004	**0.008**	0.012	0.016	**0.079**	0.197
DN.. 442	0.004	**0.010**	0.016	0.020	**0.059**	0.157	0.005	**0.010**	0.014	0.024	**0.079**	0.118	0.006	**0.010**	0.016	0.024	**0.079**	0.197
DN.. 443	0.004	**0.014**	0.020	0.039	**0.098**	0.157	0.006	**0.010**	0.016	0.035	**0.079**	0.138	0.008	**0.012**	0.020	0.039	**0.079**	0.197
DN.. 444													0.010	**0.016**	0.024	0.055	**0.079**	0.197
SN.. 332																		
SN.. 431																		
SN.. 432													0.006	**0.010**	0.016	0.024	**0.079**	0.197
SN.. 433													0.008	**0.012**	0.020	0.039	**0.079**	0.197
SN.. 434													0.010	**0.016**	0.024	0.055	**0.079**	0.197
SN.. 442													0.006	**0.010**	0.016	0.024	**0.118**	0.315
SN.. 443													0.008	**0.012**	0.020	0.039	**0.118**	0.315
SN.. 444													0.010	**0.016**	0.024	0.055	**0.118**	0.315
SN.. 543																		
SN.. 544																		
SN.. 546																		
SN.. 856																		
SN.. 866																		
TN.. 221																		
TN.. 222																		
TN.. 331													0.004	**0.008**	0.012	0.016	**0.079**	0.197
TN.. 332													0.006	**0.010**	0.016	0.024	**0.079**	0.197
TN.. 333													0.008	**0.012**	0.020	0.039	**0.079**	0.197
TN.. 431																		
TN.. 432													0.006	**0.010**	0.016	0.024	**0.118**	0.315
TN.. 433													0.008	**0.012**	0.020	0.039	**0.118**	0.315
TN.. 434																		
VN.. 331							0.003	**0.006**	0.008	0.012	**0.039**	0.071	0.004	**0.008**	0.012	0.016	**0.039**	0.157
VN.. 332							0.005	**0.008**	0.012	0.024	**0.059**	0.098	0.006	**0.010**	0.016	0.024	**0.039**	0.157
VN.. 333													0.008	**0.012**	0.020	0.039	**0.039**	0.157
WN.. 331	0.004	**0.007**	0.014	0.016	**0.031**	0.118							0.004	**0.008**	0.012	0.016	**0.039**	0.118
WN.. 332	0.004	**0.008**	0.020	0.020	**0.059**	0.118							0.006	**0.010**	0.016	0.024	**0.039**	0.118
WN.. 333													0.008	**0.012**	0.020	0.039	**0.039**	0.118
WN.. 431	0.004	**0.006**	0.014	0.016	**0.039**	0.118	0.003	**0.006**	0.010	0.012	**0.059**	0.098	0.004	**0.008**	0.012	0.016	**0.059**	0.157
WN.. 432	0.004	**0.010**	0.020	0.020	**0.059**	0.157	0.005	**0.009**	0.014	0.024	**0.079**	0.118	0.006	**0.010**	0.016	0.024	**0.059**	0.157
WN.. 433	0.006	**0.012**	0.028	0.031	**0.079**	0.197	0.006	**0.010**	0.018	0.035	**0.079**	0.138	0.008	**0.012**	0.020	0.039	**0.059**	0.157
WN.. 434													0.010	**0.016**	0.024	0.055	**0.059**	0.157

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page** 215–221.

Cutting data standard values for negative inserts

	Designation	-TMQ						-M70					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		inch/rev.			inch			inch/rev.			inch		
	CN.. 321												
	CN.. 322												
	CN.. 431												
	CN.. 432	0.008	**0.016**	0.026	0.031	**0.118**	0.197	0.008	**0.012**	0.018	0.031	**0.118**	0.236
	CN.. 433	0.010	**0.020**	0.033	0.039	**0.118**	0.236	0.010	**0.016**	0.024	0.047	**0.118**	0.236
	CN.. 434							0.012	**0.018**	0.028	0.063	**0.118**	0.236
	CN.. 542							0.008	**0.012**	0.018	0.031	**0.157**	0.315
	CN.. 543							0.010	**0.016**	0.024	0.047	**0.157**	0.315
	CN.. 544							0.012	**0.018**	0.028	0.063	**0.157**	0.315
	CN.. 546							0.016	**0.028**	0.047	0.094	**0.157**	0.315
	CN.. 642							0.008	**0.012**	0.018	0.031	**0.177**	0.354
	CN.. 643							0.010	**0.016**	0.024	0.047	**0.177**	0.354
	CN.. 644							0.012	**0.018**	0.028	0.063	**0.177**	0.354
	CN.. 646							0.016	**0.028**	0.047	0.094	**0.177**	0.354
	CN.. 866							0.016	**0.028**	0.047	0.094	**0.236**	0.512
	DN.. 330.5												
	DN.. 331												
	DN.. 332							0.008	**0.010**	0.018	0.031	**0.079**	0.197
	DN.. 333							0.010	**0.014**	0.024	0.047	**0.079**	0.197
	DN.. 431												
	DN.. 432							0.008	**0.010**	0.018	0.031	**0.098**	0.236
	DN.. 433							0.010	**0.014**	0.024	0.047	**0.098**	0.236
	DN.. 434							0.012	**0.016**	0.028	0.063	**0.098**	0.236
	DN.. 441												
	DN.. 442	0.006	**0.012**	0.020	0.031	**0.098**	0.197	0.008	**0.010**	0.018	0.031	**0.098**	0.236
	DN.. 443	0.008	**0.016**	0.024	0.039	**0.118**	0.197	0.010	**0.014**	0.024	0.047	**0.098**	0.236
	DN.. 444							0.012	**0.016**	0.028	0.063	**0.098**	0.236
	SN.. 332												
	SN.. 431												
	SN.. 432							0.008	**0.012**	0.020	0.031	**0.118**	0.236
	SN.. 433							0.010	**0.016**	0.026	0.047	**0.118**	0.236
	SN.. 434							0.012	**0.018**	0.028	0.063	**0.118**	0.236
	SN.. 442												
	SN.. 443							0.010	**0.016**	0.026	0.047	**0.157**	0.315
	SN.. 444							0.012	**0.018**	0.030	0.063	**0.157**	0.315
	SN.. 543							0.010	**0.016**	0.026	0.047	**0.177**	0.354
	SN.. 544							0.012	**0.018**	0.030	0.063	**0.177**	0.354
	SN.. 546							0.016	**0.028**	0.047	0.094	**0.177**	0.354
	SN.. 856												
	SN.. 866							0.016	**0.028**	0.047	0.094	**0.236**	0.512
	TN.. 221												
	TN.. 222												
	TN.. 331												
	TN.. 332							0.008	**0.010**	0.018	0.031	**0.098**	0.236
	TN.. 333							0.010	**0.014**	0.024	0.047	**0.098**	0.236
	TN.. 431							0.006	**0.008**	0.012	0.016	**0.118**	0.276
	TN.. 432							0.008	**0.010**	0.018	0.031	**0.118**	0.276
	TN.. 433							0.010	**0.014**	0.024	0.047	**0.118**	0.276
	TN.. 434							0.012	**0.016**	0.028	0.063	**0.118**	0.276
	VN.. 331												
	VN.. 332												
	VN.. 333												
	WN.. 331												
	WN.. 332							0.008	**0.012**	0.018	0.031	**0.079**	0.157
	WN.. 333							0.010	**0.016**	0.024	0.047	**0.079**	0.157
	WN.. 431												
	WN.. 432	0.008	**0.012**	0.026	0.031	**0.118**	0.197	0.008	**0.012**	0.018	0.031	**0.098**	0.197
	WN.. 433	0.010	**0.016**	0.033	0.039	**0.118**	0.236	0.010	**0.016**	0.024	0.047	**0.098**	0.197
	WN.. 434							0.012	**0.018**	0.028	0.063	**0.098**	0.197

Sharp ◄——————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-R28						-R58						-R88					
	f			a_p			f			a_p			f			a_p		
	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
	inch/rev.			inch			inch/rev.			inch			inch/rev.			inch		
CN.. 321																		
CN.. 322																		
CN.. 431																		
CN.. 432	0.010	**0.014**	0.022	0.031	**0.118**	0.276	0.010	**0.018**	0.028	0.039	**0.118**	0.276						
CN.. 433	0.012	**0.018**	0.028	0.039	**0.118**	0.276	0.012	**0.022**	0.033	0.059	**0.118**	0.276						
CN.. 434	0.012	**0.024**	0.035	0.059	**0.118**	0.276	0.014	**0.026**	0.039	0.079	**0.118**	0.276						
CN.. 542																		
CN.. 543	0.012	**0.018**	0.028	0.039	**0.157**	0.354	0.012	**0.022**	0.033	0.059	**0.157**	0.354						
CN.. 544	0.014	**0.024**	0.035	0.059	**0.157**	0.354	0.014	**0.026**	0.039	0.079	**0.157**	0.354						
CN.. 546							0.016	**0.030**	0.047	0.098	**0.157**	0.354	0.016	**0.028**	0.047	0.079	**0.197**	0.354
CN.. 642																		
CN.. 643	0.012	**0.018**	0.028	0.039	**0.217**	0.472	0.014	**0.022**	0.033	0.059	**0.217**	0.472						
CN.. 644	0.014	**0.024**	0.035	0.059	**0.217**	0.472	0.016	**0.026**	0.039	0.079	**0.217**	0.472	0.016	**0.028**	0.039	0.079	**0.197**	0.472
CN.. 646	0.014	**0.026**	0.039	0.079	**0.217**	0.472	0.016	**0.030**	0.047	0.098	**0.217**	0.472	0.016	**0.028**	0.047	0.079	**0.197**	0.472
CN.. 866	0.014	**0.028**	0.039	0.079	**0.276**	0.630	0.018	**0.031**	0.051	0.098	**0.315**	0.630	0.024	**0.039**	0.059	0.138	**0.394**	0.709
DN.. 330.5																		
DN.. 331																		
DN.. 332																		
DN.. 333																		
DN.. 431																		
DN.. 432																		
DN.. 433																		
DN.. 434																		
DN.. 441																		
DN.. 442																		
DN.. 443	0.010	**0.018**	0.028	0.039	**0.098**	0.236	0.012	**0.020**	0.031	0.059	**0.098**	0.236						
DN.. 444	0.012	**0.024**	0.033	0.059	**0.098**	0.236	0.014	**0.024**	0.035	0.079	**0.098**	0.236						
SN.. 332																		
SN.. 431																		
SN.. 432							0.010	**0.018**	0.028	0.039	**0.118**	0.276						
SN.. 433							0.012	**0.022**	0.033	0.059	**0.118**	0.276						
SN.. 434																		
SN.. 442																		
SN.. 443	0.012	**0.014**	0.028	0.039	**0.157**	0.354	0.012	**0.022**	0.033	0.059	**0.157**	0.354						
SN.. 444	0.014	**0.024**	0.035	0.059	**0.157**	0.354	0.014	**0.026**	0.039	0.079	**0.157**	0.354						
SN.. 543							0.014	**0.022**	0.033	0.059	**0.217**	0.472						
SN.. 544	0.014	**0.024**	0.035	0.059	**0.217**	0.472	0.016	**0.026**	0.039	0.079	**0.217**	0.472	0.016	**0.028**	0.039	0.079	**0.197**	0.472
SN.. 546							0.016	**0.030**	0.047	0.079	**0.217**	0.472	0.016	**0.028**	0.047	0.079	**0.197**	0.472
SN.. 856	0.014	**0.026**	0.039	0.079	**0.276**	0.630	0.018	**0.031**	0.051	0.098	**0.315**	0.630	0.024	**0.039**	0.059	0.138	**0.394**	0.709
SN.. 866	0.014	**0.026**	0.039	0.079	**0.276**	0.630	0.018	**0.031**	0.051	0.098	**0.315**	0.630	0.024	**0.039**	0.059	0.138	**0.394**	0.709
TN.. 221																		
TN.. 222																		
TN.. 331																		
TN.. 332																		
TN.. 333																		
TN.. 431																		
TN.. 432																		
TN.. 433							0.012	**0.020**	0.031	0.059	**0.118**	0.276						
TN.. 434	0.012	**0.022**	0.033	0.059	**0.118**	0.276												
VN.. 331																		
VN.. 332																		
VN.. 333																		
WN.. 331																		
WN.. 332																		
WN.. 333																		
WN.. 431																		
WN.. 432																		
WN.. 433																		
WN.. 434																		

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page** 215–221.

Cutting data standard values for negative inserts

	Designation	-F30						-M30					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		inch/rev.			inch			inch/rev.			inch		
	CN.. 321												
	CN.. 322												
	CN.. 431	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	CN.. 432	0.004	**0.009**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.079**	0.177
	CN.. 433							0.008	**0.012**	0.020	0.047	**0.098**	0.197
	CN.. 434							0.010	**0.014**	0.022	0.063	**0.098**	0.197
	CN.. 542												
	CN.. 543												
	CN.. 544												
	CN.. 546												
	CN.. 642												
	CN.. 643												
	CN.. 644												
	CN.. 646												
	CN.. 866												
	DN.. 330.5												
	DN.. 331	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	DN.. 332	0.004	**0.008**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.079**	0.177
	DN.. 333							0.008	**0.012**	0.020	0.047	**0.079**	0.177
	DN.. 431	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	DN.. 432	0.004	**0.008**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.014	0.039	**0.098**	0.157
	DN.. 433							0.008	**0.012**	0.020	0.039	**0.098**	0.157
	DN.. 434												
	DN.. 441	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	DN.. 442	0.004	**0.008**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.079**	0.217
	DN.. 443							0.008	**0.012**	0.020	0.047	**0.079**	0.217
	DN.. 444												
	SN.. 332												
	SN.. 431	0.004	**0.006**	0.012	0.016	**0.039**	0.079						
	SN.. 432	0.006	**0.008**	0.016	0.031	**0.059**	0.098	0.008	**0.010**	0.018	0.039	**0.079**	0.177
	SN.. 433	0.006	**0.008**	0.016	0.047	**0.071**	0.098	0.010	**0.012**	0.020	0.047	**0.079**	0.197
	SN.. 434												
	SN.. 442												
	SN.. 443												
	SN.. 444												
	SN.. 543												
	SN.. 544												
	SN.. 546												
	SN.. 856												
	SN.. 866												
	TN.. 221												
	TN.. 222												
	TN.. 331	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	TN.. 332	0.004	**0.006**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.079**	0.177
	TN.. 333							0.008	**0.012**	0.020	0.047	**0.079**	0.177
	TN.. 431												
	TN.. 432												
	TN.. 433												
	TN.. 434												
	VN.. 331	0.003	**0.004**	0.008	0.016	**0.039**	0.079						
	VN.. 332	0.004	**0.006**	0.012	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.059**	0.157
	VN.. 333												
	WN.. 331	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	WN.. 332	0.004	**0.008**	0.012	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.059**	0.138
	WN.. 333							0.008	**0.012**	0.018	0.047	**0.059**	0.157
	WN.. 431	0.002	**0.006**	0.010	0.016	**0.039**	0.079						
	WN.. 432	0.004	**0.008**	0.014	0.031	**0.059**	0.098	0.006	**0.010**	0.016	0.039	**0.079**	0.177
	WN.. 433							0.008	**0.012**	0.020	0.047	**0.079**	0.197
	WN.. 434												

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The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-M60						-M34						-M42					
	f			a_p			f			a_p			f			a_p		
	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
	inch/rev.			inch			inch/rev.			inch			inch/rev.			inch		
CN.. 321																		
CN.. 322																		
CN.. 431							0.003	**0.005**	0.007	0.039	**0.059**	0.118	0.004	**0.008**	0.010	0.031	**0.059**	0.157
CN.. 432	0.010	**0.012**	0.020	0.059	**0.098**	0.236	0.004	**0.006**	0.014	0.039	**0.071**	0.138	0.008	**0.012**	0.017	0.039	**0.098**	0.157
CN.. 433	0.012	**0.014**	0.022	0.079	**0.118**	0.236	0.005	**0.008**	0.016	0.059	**0.079**	0.157	0.011	**0.014**	0.022	0.047	**0.118**	0.165
CN.. 434	0.012	**0.016**	0.024	0.079	**0.118**	0.236	0.006	**0.010**	0.018	0.079	**0.118**	0.177						
CN.. 542																		
CN.. 543	0.012	**0.014**	0.022	0.079	**0.118**	0.315												
CN.. 544																		
CN.. 546																		
CN.. 642																		
CN.. 643																		
CN.. 644																		
CN.. 646																		
CN.. 866																		
DN.. 330.5																		
DN.. 331													0.006	**0.010**	0.012	0.039	**0.079**	0.138
DN.. 332													0.008	**0.012**	0.016	0.047	**0.098**	0.157
DN.. 333																		
DN.. 431							0.003	**0.005**	0.007	0.031	**0.047**	0.098	0.006	**0.010**	0.014	0.039	**0.079**	0.157
DN.. 432	0.010	**0.012**	0.018	0.059	**0.098**	0.236	0.004	**0.006**	0.012	0.039	**0.071**	0.138	0.008	**0.012**	0.016	0.047	**0.098**	0.197
DN.. 433	0.012	**0.016**	0.022	0.059	**0.098**	0.236	0.005	**0.008**	0.015	0.059	**0.079**	0.157						
DN.. 434																		
DN.. 441													0.006	**0.010**	0.014	0.039	**0.079**	0.157
DN.. 442	0.010	**0.012**	0.018	0.059	**0.098**	0.236	0.004	**0.006**	0.012	0.039	**0.071**	0.138	0.008	**0.012**	0.017	0.047	**0.098**	0.197
DN.. 443	0.012	**0.016**	0.022	0.059	**0.098**	0.236	0.005	**0.008**	0.015	0.059	**0.079**	0.157						
DN.. 444																		
SN.. 332																		
SN.. 431																		
SN.. 432	0.012	**0.014**	0.020	0.059	**0.079**	0.236	0.006	**0.010**	0.016	0.039	**0.079**	0.157	0.006	**0.010**	0.016	0.039	**0.079**	0.177
SN.. 433	0.012	**0.016**	0.022	0.079	**0.098**	0.236	0.006	**0.010**	0.018	0.059	**0.098**	0.177	0.008	**0.010**	0.018	0.039	**0.079**	0.197
SN.. 434	0.012	**0.016**	0.024	0.079	**0.098**	0.236												
SN.. 442																		
SN.. 443																		
SN.. 444																		
SN.. 543																		
SN.. 544																		
SN.. 546																		
SN.. 856																		
SN.. 866																		
TN.. 221																		
TN.. 222																		
TN.. 331													0.004	**0.008**	0.012	0.031	**0.079**	0.197
TN.. 332	0.010	**0.010**	0.018	0.059	**0.098**	0.197	0.004	**0.006**	0.014	0.039	**0.079**	0.157	0.005	**0.008**	0.014	0.031	**0.079**	0.197
TN.. 333	0.012	**0.012**	0.022	0.079	**0.098**	0.217												
TN.. 431							0.004	**0.006**	0.014	0.039	**0.079**	0.157						
TN.. 432							0.005	**0.008**	0.016	0.059	**0.098**	0.157						
TN.. 433																		
TN.. 434							0.006	**0.010**	0.018	0.079	**0.098**	0.177						
VN.. 331							0.003	**0.004**	0.007	0.031	**0.047**	0.079						
VN.. 332							0.004	**0.006**	0.008	0.039	**0.059**	0.098						
VN.. 333							0.005	**0.007**	0.010	0.059	**0.071**	0.118						
WN.. 331													0.004	**0.009**	0.014	0.020	**0.039**	0.118
WN.. 332	0.010	**0.012**	0.018	0.059	**0.079**	0.157							0.004	**0.009**	0.014	0.020	**0.039**	0.118
WN.. 333	0.012	**0.014**	0.020	0.079	**0.098**	0.177												
WN.. 431													0.004	**0.008**	0.014	0.016	**0.059**	0.157
WN.. 432	0.010	**0.012**	0.020	0.059	**0.079**	0.197	0.004	**0.006**	0.014	0.039	**0.079**	0.157	0.006	**0.010**	0.016	0.031	**0.059**	0.157
WN.. 433	0.012	**0.014**	0.022	0.079	**0.098**	0.217	0.005	**0.008**	0.016	0.059	**0.079**	0.157	0.008	**0.012**	0.018	0.039	**0.079**	0.157
WN.. 434																		

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page** 215–221.

Cutting data values for positive inserts

	Designation	-CF05						-SF					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		inch/rev.			inch			inch/rev.			inch		
	CC.. 21.5X5							0.001	**0.001**	0.002	0.004	**0.016**	0.059
	CC.. 21.50							0.001	**0.001**	0.002	0.008	**0.016**	0.059
	CC.. 21.5.5	0.001	**0.003**	0.005	0.004	**0.012**	0.051	0.001	**0.004**	0.006	0.008	**0.016**	0.059
	CC.. 21.51	0.002	**0.004**	0.005	0.004	**0.012**	0.051	0.002	**0.004**	0.008	0.008	**0.024**	0.059
	CC.. 21.52							0.002	**0.005**	0.008	0.008	**0.039**	0.059
	CC..32.5X5							0.001	**0.001**	0.002	0.008	**0.030**	0.079
	CC.. 32.50							0.001	**0.001**	0.002	0.008	**0.030**	0.079
	CC.. 32.5.5	0.001	**0.003**	0.005	0.004	**0.012**	0.051	0.002	**0.003**	0.004	0.008	**0.030**	0.079
	CC.. 32.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.030**	0.079
	CC.. 32.52	0.002	**0.005**	0.010	0.008	**0.016**	0.051	0.002	**0.005**	0.010	0.016	**0.039**	0.079
	CC.. 32.53												
	CC.. 430.5							0.002	**0.003**	0.004	0.008	**0.031**	0.098
	CC.. 431							0.002	**0.005**	0.008	0.008	**0.039**	0.098
	CC.. 432							0.003	**0.006**	0.010	0.016	**0.039**	0.098
	CC.. 433							0.003	**0.006**	0.010	0.016	**0.059**	0.098
	DC.. 21.5X5												
	DC.. 21.50												
	DC.. 21.50.3												
	DC.. 21.5.5	0.001	**0.003**	0.005	0.004	**0.012**	0.051	0.001	**0.004**	0.006	0.004	**0.016**	0.059
	DC.. 21.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.024**	0.059
	DC.. 21.52												
	DC.. 32.5X5												
	DC.. 32.50												
	DC.. 32.50.3												
	DC.. 32.5.5	0.001	**0.003**	0.005	0.004	**0.012**	0.051						
	DC.. 32.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.028**	0.079
	DC.. 32.52	0.002	**0.005**	0.010	0.008	**0.016**	0.051	0.003	**0.006**	0.010	0.016	**0.039**	0.079
	DC.. 32.53												
	RC.. 0602MO												
	RC.. 0803MO												
	RC.. 1003MO												
	RC.. 1204MO												
	RC.. 1606MO												
	RC.. 2006MO												
	RC.. 2507MO												
	SC.. 32.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.028**	0.079
	SC.. 32.52	0.002	**0.005**	0.010	0.008	**0.016**	0.051	0.003	**0.006**	0.010	0.016	**0.039**	0.079
	SC.. 432							0.003	**0.006**	0.010	0.016	**0.039**	0.098
	SC.. 433												
	TC.. 1.81.51												
	TC.. 21.5.5	0.001	**0.003**	0.005	0.004	**0.012**	0.051						
	TC.. 21.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.028**	0.079
	TC.. 21.52	0.002	**0.005**	0.010	0.008	**0.016**	0.051	0.003	**0.006**	0.010	0.016	**0.039**	0.079
	TC.. 32.5.5												
	TC.. 32.51	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.002	**0.005**	0.008	0.008	**0.031**	0.098
	TC.. 32.52							0.003	**0.006**	0.010	0.016	**0.039**	0.098
	TC.. 32.53												
	TC.. 432												
	VC.. 220.X12												
	VC.. 220.X25												
	VC.. 220.X37												
	VC.. 220.5	0.001	**0.002**	0.005	0.004	**0.012**	0.051	0.001	**0.003**	0.006	0.004	**0.016**	0.059
	VC.. 221	0.002	**0.003**	0.009	0.008	**0.016**	0.051	0.002	**0.004**	0.008	0.008	**0.024**	0.059
	VC.. 222							0.003	**0.005**	0.009	0.016	**0.039**	0.059
	VC.. 330.5												
	VC.. 331	0.002	**0.003**	0.009	0.008	**0.016**	0.051	0.002	**0.004**	0.008	0.008	**0.028**	0.079
	VC.. 332	0.002	**0.004**	0.009	0.008	**0.016**	0.051	0.003	**0.005**	0.009	0.016	**0.039**	0.079
	VC.. 333												
	VC.. 220530												
	WC.. 1.21.50							0.001	**0.003**	0.004	0.004	**0.016**	0.039
	WC.. 1.21.51							0.001	**0.004**	0.008	0.004	**0.024**	0.059

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The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-CF55						-SMF						-SM					
	f			a_p			f			a_p			f			a_p		
	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
	inch/rev.			inch			inch/rev.			inch			inch/rev.			inch		
CC.. 21.5X5																		
CC.. 21.50																		
CC.. 21.5.5													0.002	**0.005**	0.008	0.008	**0.024**	0.098
CC.. 21.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.028**	0.079	0.003	**0.007**	0.012	0.016	**0.031**	0.098
CC.. 21.52							0.004	**0.007**	0.011	0.024	**0.039**	0.079	0.005	**0.008**	0.014	0.031	**0.039**	0.098
CC..32.5X5																		
CC.. 32.50																		
CC.. 32.5.5																		
CC.. 32.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.031**	0.098	0.003	**0.007**	0.012	0.016	**0.039**	0.118
CC.. 32.52	0.002	**0.006**	0.010	0.008	**0.020**	0.051	0.004	**0.007**	0.011	0.024	**0.039**	0.098	0.005	**0.008**	0.014	0.031	**0.047**	0.118
CC.. 32.53													0.006	**0.009**	0.016	0.047	**0.059**	0.118
CC.. 430.5																		
CC.. 431	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.039**	0.118	0.003	**0.007**	0.012	0.016	**0.047**	0.138
CC.. 432							0.004	**0.007**	0.011	0.024	**0.047**	0.118	0.005	**0.008**	0.014	0.031	**0.059**	0.138
CC.. 433													0.006	**0.009**	0.016	0.047	**0.079**	0.138
DC.. 21.5X5																		
DC.. 21.50																		
DC.. 21.50.3																		
DC.. 21.5.5	0.001	**0.004**	0.005	0.004	**0.016**	0.051							0.002	**0.005**	0.008	0.008	**0.024**	0.098
DC.. 21.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.028**	0.079	0.003	**0.007**	0.012	0.016	**0.031**	0.098
DC.. 21.52							0.004	**0.007**	0.011	0.024	**0.039**	0.079	0.005	**0.008**	0.012	0.031	**0.039**	0.098
DC.. 32.5X5																		
DC.. 32.50																		
DC.. 32.50.3																		
DC.. 32.5.5																		
DC.. 32.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.031**	0.098	0.031	**0.007**	0.012	0.016	**0.039**	0.118
DC.. 32.52	0.002	**0.006**	0.010	0.008	**0.020**	0.051	0.004	**0.007**	0.011	0.024	**0.047**	0.098	0.005	**0.008**	0.014	0.031	**0.047**	0.118
DC.. 32.53													0.006	**0.009**	0.016	0.047	**0.067**	0.118
RC.. 0602MO													0.008	**0.012**	0.020	0.008	**0.020**	0.059
RC.. 0803MO													0.008	**0.012**	0.024	0.008	**0.024**	0.079
RC.. 1003MO													0.010	**0.016**	0.028	0.008	**0.028**	0.098
RC.. 1204MO													0.012	**0.020**	0.031	0.008	**0.031**	0.118
RC.. 1606MO							0.006	**0.012**	0.024	0.010	**0.079**	0.138	0.016	**0.024**	0.039	0.012	**0.039**	0.138
RC.. 2006MO													0.020	**0.031**	0.047	0.016	**0.047**	0.157
RC.. 2507MO													0.024	**0.035**	0.055	0.024	**0.079**	0.197
SC.. 32.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.010	0.012	**0.031**	0.098	0.003	**0.007**	0.012	0.016	**0.039**	0.118
SC.. 32.52	0.002	**0.006**	0.010	0.008	**0.020**	0.051	0.004	**0.007**	0.011	0.024	**0.039**	0.098	0.005	**0.008**	0.014	0.031	**0.047**	0.118
SC.. 432							0.004	**0.007**	0.011	0.024	**0.047**	0.118	0.005	**0.008**	0.014	0.031	**0.059**	0.138
SC.. 433													0.006	**0.009**	0.016	0.047	**0.079**	0.138
TC.. 1.81.51													0.003	**0.005**	0.008	0.016	**0.031**	0.079
TC.. 21.5.5													0.003	**0.004**	0.008	0.016	**0.024**	0.118
TC.. 21.51	0.002	**0.005**	0.009	0.008	**0.020**	0.051							0.005	**0.008**	0.014	0.031	**0.047**	0.118
TC.. 21.52							0.004	**0.007**	0.011	0.024	**0.039**	0.098	0.005	**0.008**	0.014	0.031	**0.047**	0.118
TC.. 32.5.5																		
TC.. 32.51							0.003	**0.006**	0.010	0.012	**0.039**	0.118	0.003	**0.007**	0.012	0.016	**0.047**	0.138
TC.. 32.52	0.002	**0.006**	0.010	0.008	**0.020**	0.051	0.004	**0.007**	0.011	0.024	**0.047**	0.118	0.005	**0.008**	0.014	0.031	**0.059**	0.138
TC.. 32.53													0.006	**0.009**	0.016	0.047	**0.067**	0.138
TC.. 432													0.005	**0.008**	0.014	0.031	**0.098**	0.236
VC.. 220.X12																		
VC.. 220.X25																		
VC.. 220.X37																		
VC.. 220.5							0.002	**0.004**	0.007	0.008	**0.020**	0.079						
VC.. 221	0.002	**0.004**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.009	0.012	**0.028**	0.079						
VC.. 222																		
VC.. 330.5																		
VC.. 331	0.002	**0.004**	0.009	0.008	**0.020**	0.051	0.003	**0.006**	0.009	0.012	**0.031**	0.098	0.003	**0.007**	0.010	0.016	**0.039**	0.118
VC.. 332	0.002	**0.005**	0.009	0.008	**0.020**	0.051	0.004	**0.007**	0.011	0.024	**0.039**	0.098	0.005	**0.008**	0.012	0.031	**0.047**	0.118
VC.. 333													0.006	**0.009**	0.013	0.047	**0.059**	0.118
VC.. 220530																		
WC.. 1.21.50																		
WC.. 1.21.51																		

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page** 215–221.

Cutting data values for positive inserts

	Designation	-SMQ						-M25					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		inch/rev.			inch			inch/rev.			inch		
	CC.. 21.5X5												
	CC.. 21.50												
	CC.. 21.5.5												
	CC.. 21.51							0.002	**0.005**	0.008	0.008	**0.043**	0.079
	CC.. 21.52												
	CC..32.5X5												
	CC.. 32.50												
	CC.. 32.5.5												
	CC.. 32.51	0.004	**0.010**	0.016	0.016	**0.079**	0.157	0.002	**0.006**	0.009	0.008	**0.047**	0.087
	CC.. 32.52	0.006	**0.012**	0.020	0.031	**0.079**	0.157	0.004	**0.008**	0.012	0.016	**0.071**	0.126
	CC.. 32.53												
	CC.. 430.5												
	CC.. 431	0.004	**0.010**	0.016	0.016	**0.079**	0.157						
	CC.. 432	0.006	**0.012**	0.020	0.031	**0.079**	0.157						
	CC.. 433												
	DC.. 21.5X5												
	DC.. 21.50												
	DC.. 21.50.3												
	DC.. 21.5.5							0.002	**0.004**	0.005	0.004	**0.035**	0.063
	DC.. 21.51	0.004	**0.007**	0.010	0.016	**0.059**	0.118	0.002	**0.005**	0.007	0.008	**0.043**	0.079
	DC.. 21.52												
	DC.. 32.5X5												
	DC.. 32.50												
	DC.. 32.50.3												
	DC.. 32.5.5							0.002	**0.004**	0.006	0.004	**0.043**	0.079
	DC.. 32.51	0.004	**0.010**	0.016	0.016	**0.079**	0.157	0.002	**0.006**	0.009	0.008	**0.047**	0.087
	DC.. 32.52	0.006	**0.012**	0.020	0.031	**0.079**	0.157	0.004	**0.008**	0.012	0.016	**0.071**	0.126
	DC.. 32.53												
	RC.. 0602MO												
	RC.. 0803MO												
	RC.. 1003MO												
	RC.. 1204MO												
	RC.. 1606MO												
	RC.. 2006MO												
	RC.. 2507MO												
	SC.. 32.51												
	SC.. 32.52												
	SC.. 432												
	SC.. 433												
	TC.. 1.81.51												
	TC.. 21.5.5												
	TC.. 21.51							0.002	**0.005**	0.008	0.008	**0.047**	0.087
	TC.. 21.52												
	TC.. 32.5.5												
	TC.. 32.51							0.002	**0.006**	0.009	0.008	**0.063**	0.118
	TC.. 32.52							0.004	**0.008**	0.012	0.016	**0.075**	0.134
	TC.. 32.53												
	TC.. 432												
	VC.. 220.X12												
	VC.. 220.X25												
	VC.. 220.X37												
	VC.. 220.5												
	VC.. 221												
	VC.. 222												
	VC.. 330.5												
	VC.. 331							0.002	**0.005**	0.008	0.008	**0.047**	0.087
	VC.. 332							0.004	**0.006**	0.010	0.016	**0.055**	0.118
	VC.. 333												
	VC.. 220530												
	WC.. 1.21.50												
	WC.. 1.21.51												

Sharp ◄——————————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-M55						-F05					
	f			a_p			f			a_p		
	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
	inch/rev.			inch			inch/rev.			inch		
CC.. 21.5X5												
CC.. 21.50							0.001	**0.001**	0.002	0.004	**0.039**	0.079
CC.. 21.5.5							0.001	**0.002**	0.004	0.004	**0.039**	0.079
CC.. 21.51	0.002	**0.005**	0.008	0.016	**0.059**	0.102	0.001	**0.004**	0.008	0.004	**0.039**	0.079
CC.. 21.52												
CC..32.5X5												
CC.. 32.50												
CC.. 32.5.5												
CC.. 32.51	0.003	**0.006**	0.009	0.016	**0.067**	0.118						
CC.. 32.52	0.005	**0.009**	0.014	0.031	**0.094**	0.157						
CC.. 32.53												
CC.. 430.5												
CC.. 431	0.003	**0.007**	0.011	0.016	**0.087**	0.157						
CC.. 432	0.005	**0.010**	0.016	0.031	**0.110**	0.189						
CC.. 433												
DC.. 21.5X5							0.001	**0.001**	0.002	0.004	**0.039**	0.079
DC.. 21.50							0.001	**0.001**	0.002	0.004	**0.039**	0.079
DC.. 21.50.3							0.001	**0.002**	0.003	0.004	**0.039**	0.079
DC.. 21.5.5							0.001	**0.002**	0.004	0.004	**0.039**	0.079
DC.. 21.51	0.002	**0.006**	0.009	0.016	**0.051**	0.087						
DC.. 21.52	0.003	**0.006**	0.009	0.031	**0.063**	0.094						
DC.. 32.5X5							0.001	**0.001**	0.002	0.004	**0.049**	0.098
DC.. 32.50							0.001	**0.001**	0.002	0.004	**0.049**	0.098
DC.. 32.50.3							0.001	**0.002**	0.003	0.004	**0.049**	0.098
DC.. 32.5.5							0.001	**0.003**	0.004	0.004	**0.049**	0.098
DC.. 32.51	0.003	**0.006**	0.009	0.016	**0.067**	0.118	0.001	**0.004**	0.010	0.004	**0.049**	0.098
DC.. 32.52	0.005	**0.009**	0.014	0.031	**0.094**	0.157						
DC.. 32.53												
RC.. 0602MO												
RC.. 0803MO												
RC.. 1003MO												
RC.. 1204MO												
RC.. 1606MO												
RC.. 2006MO												
RC.. 2507MO												
SC.. 32.51	0.005	**0.009**	0.014	0.031	**0.094**	0.157						
SC.. 32.52	0.005	**0.010**	0.016	0.031	**0.110**	0.189						
SC.. 432												
SC.. 433												
TC.. 1.81.51	0.002	**0.005**	0.007	0.016	**0.051**	0.087						
TC.. 21.5.5												
TC.. 21.51	0.002	**0.006**	0.009	0.016	**0.055**	0.094						
TC.. 21.52												
TC.. 32.5.5												
TC.. 32.51												
TC.. 32.52	0.005	**0.009**	0.014	0.031	**0.102**	0.173						
TC.. 32.53												
TC.. 432												
VC.. 220.X12							0.001	**0.001**	0.002	0.004	**0.049**	0.098
VC.. 220.X25							0.001	**0.001**	0.002	0.004	**0.049**	0.098
VC.. 220.X37							0.001	**0.002**	0.003	0.004	**0.049**	0.098
VC.. 220.5							0.001	**0.003**	0.004	0.004	**0.049**	0.098
VC.. 221							0.001	**0.006**	0.010	0.004	**0.049**	0.098
VC.. 222												
VC.. 330.5												
VC.. 331	0.003	**0.006**	0.008	0.016	**0.067**	0.118						
VC.. 332	0.005	**0.008**	0.012	0.031	**0.083**	0.134						
VC.. 333												
VC.. 220530												
WC.. 1.21.50												
WC.. 1.21.51												

Sharp ◄——————————————————————————► stable

Information on the cutting data of chip breakers not included in this overview, can be found on → **Page** 215–221.

Cutting edge preparation – PCBN

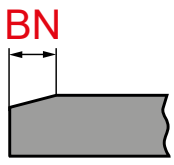
The stability of a cutting edge increases as the chamfer angle and chamfer width increase, but at the same time the cutting force increases and subsequently also the temperature in the process. A larger chamfer distributes the cutting force across a larger area of the cutting edge.
This increases the stability of the cutting edge, thereby facilitating higher feeds. If process stability and a constant tool life are the highest priority, then we recommend choosing a large chamfer.
If the highest priority is to achieve a very good surface quality and optimum dimensional accuracy, then it is advisable to use a small chamfer for the manufacturing process. Vibrations, cutting forces and temperature are hereby reduced.
Hard turning in most cases is the finishing of the workpiece, the optimum cutting edge preparation is a deciding factor in order to reliably produce high-quality components with a long service life.

In the case of indexable inserts with no chip breaker, the correct chamfer design is vital, as well as the type of cutting edge. For this reason, the designation system has been extended with the following key to the various chamfer designs. The design and angle can be seen in the overview below.

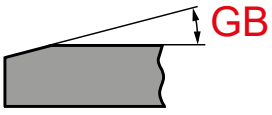
Preparation key at CERATIZIT

Designation in line with ISO Type of cutting edge	CERATIZIT chamfer design	Definition
SN (chamfered and rounded)	014D	0.0055“ x 20° / 0,14 x 20°
EN (rounded)	rounded	

Chamfer design **SN**



Chamfer width



Chamfer angle

Type of cutting edge **EN**

CODE FOR CHAMFER ANGLE GB

A	B	C	D	E	F	G
5°	10°	15°	20°	25°	30°	35°

Precision and geometrical accuracy

Process stability, tool life

Examples	Chamfer width [inch]	Chamfer width [mm]	Chamfer angle GB
CNGA 120408SN-009C	0.0035	0,09	15°
DCGW 11T304SN-014D	0.0055	0,14	20°

Measures in the case of turning problems with PCBN

Troubleshooting

Problem	Possible causes	Remedy
Poor tool lives	▲ Cutting speed not within the specifications ▲ Chip softening not carried out	▲ Increase the cutting speed ▲ Ideally, chip is red hot
Bad surface quality	▲ Feed too high ▲ Corner radius too small	▲ Reduce feed ▲ Increase corner radius
Chatter marks	▲ Tool overhang too long	▲ Reduce projection length ▲ Use more stable holder
Vibration	▲ Cutting pressure too high ▲ Chip thickness too large ▲ Centre height incorrect ▲ Unstable tool or workpiece clamping ▲ Indexable insert radius too large, high recoil force	▲ Reduce cutting pressure ▲ Reduce chip thickness ▲ Check/adjust centre height ▲ Use smaller radius
Burrs on workpiece	▲ With soft materials (sintered steel) ▲ Cutting pressure too high ▲ Corner radius too large ▲ Chamfer angle too large	▲ Use smaller radius ▲ Adjust chip thickness ▲ Increase cutting depth ▲ Increase cutting speed ▲ Reduce chamfer angle ▲ Use sharp cutting edge
Notch wear	▲ Constant cutting depth leaving witness	▲ For dual-cut strategy, use different cutting depths ▲ Increase chamfer angle
Edge breakage on the workpiece	▲ Sharp edge at the exit	▲ Change machining direction ▲ Reduce feed at entry and exit ▲ Program soft machining with chamfers and radii

Diamond as a cutting material

Ensures

- ▲ Optimal surface quality
- ▲ burr-free workpieces
- ▲ high service lives
- ▲ lowest cutting forces
- ▲ High Process Security

Complete programme of roughing, finishing and Trailing edge inserts for machining aluminium, non ferrous metals, plastics, ...

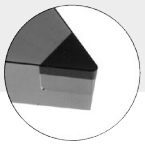
The cutting materials

	CTD CD10 (CVD)	CTD PD20 (PKD)	CTD PU20 (PKD)	CTD PS30 (PKD)
	Fine grain Size (N10)	Fine grain grade (N20)	Coarse grain grade (N20)	Coarse grain Size (N30)
Properties	▲ perfect sharp edges ▲ no cutting pressure ▲ very close tolerances ▲ highest abrasion resistance with highest toughness ▲ very high heat conductivity	▲ high sharpness ▲ lower cutting pressure than PDC-S ▲ close tolerance ▲ lower abrasion resistance with increased toughness	▲ Very sharp cutting edge ▲ Reduced cutting pressure ▲ Tight tolerances ▲ Very high level of wear resistance and toughness	▲ high sharpness ▲ lower cutting pressure ▲ close tolerance ▲ lower abrasion resistance than with the PDC, with increased toughness
Material	suitable for superfinishing and semi-finishing of all non ferrous metals and NE-composite materials with small to high levels of abrasiveness	suitable for fine machining of all NE-materials with low abrasiveness	suitable for finishing to roughing non-ferrous metals and non-ferrous materials with highly abrasive alloying element. High chip removal on fibre-reinforced plastics such as CFRP and GFRP.	suitable for fine machining of all NE-materials and non-ferrous metals with low to very high levels of abrasiveness

Cutting Geometries

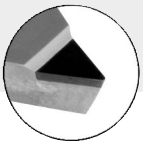
Neutral rake angle:

- ▲ higher cuting force
- ▲ higher temperature
- ▲ improved surface quality
- ▲ for stable workpieces



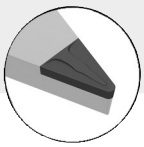
Positive rake angle: 5° / 7°

- ▲ Lower cutting force
- ▲ Lower temperature
- ▲ reduction in surface quality
- ▲ for unstable workpieces
- ▲ improved accuracy



CB chip breaker geometries:

- ▲ Reliable chip control
- ▲ Ideal for low-alloy aluminium
- ▲ For F | M | R applications



Notes on diamond usage

- ▲ Coolant is not generally needed, however it facilitates chip removal
- ▲ Note the chemical reaction to carbide-forming elements (PCD)
- ▲ Note the thermal interaction and critical temperature:
  PCD: 600 °C, CVD: 700 °C
  Depending on the material, use cooling.

Standard chip breakers / application notes

Main application steel and cast iron, secondary application stainless steels

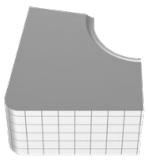
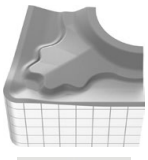
Negative

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-CF / -CF20 ▲ Fine finishing ▲ Sharp cutting edge for low cutting forces ▲ Good chip control even at small depths of cut	**CTEP110 / TCM10** CTEP110 / TCM10 CTEP110 / TCM10			12°	0.012–0.059	0.003–0.010	CN.. DN.. TN.. WN..
-F40 ▲ Fine turning chip breaker for machining steels ▲ Good chip control ▲ Ideal for copy turning work	**CTCP125-P** CTCP125-P	**CTCP125-P** CTCP125-P		24° 0.003	0.020–0.079	0.004–0.012	VN..
-F50 ▲ Fine turning chip breaker for fine machining ▲ Steel and stainless steels ▲ Excellent chip control ▲ High surface quality	**CTCP115-P / CTCP125-P**	**CTCP115-P / CTCP125-P / CTCP135-P** CTCP135-P	**CTCP135-P** CTCP135-P	15°	0.004–0.102	0.002–0.014	CN.. DN.. SN.. TN.. VN.. WN..
-TFQ ▲ Wiper geometry ▲ Finishing to medium machining ▲ Very high feeds ▲ High surface quality	**CTEP110 / CTCP115-P** CTEP110 CTEP110 / CTCP115-P	**CTCP115-P / CTCP125-P** CTCP115-P / CTCP125-P		17° 0.006	0.020–0.197	0.004–0.024	CN.. DN.. WN..
-XU ▲ Finishing to light roughing ▲ Universal chip breaker ▲ Copy turning ▲ Excellent chip formation ▲ Low cutting forces	**CTCP115-P / CTCP125-P** CTCP115-P	CTCP115-P / **CTCP125-P** CTCP115-P / CTCP125-P	CTCP125-P	10° 0.006	0.016–0.177	0.005–0.016	CN.. DN.. VN.. WN..

9

Standard chip breakers / application notes

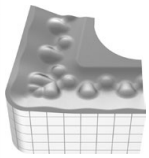
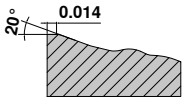
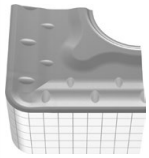
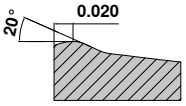
Main application steel and cast iron, secondary application stainless steels

Negative	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-M40 ▲ Stable geometry ▲ Medium feed rates ▲ Can be used for any application ▲ Good chip control	 M	**CTCP125-P** CTCP125-P	**CTCP125-P** CTCP125-P		8,60° 0.004 0.020–0.118	0.020–0.118	VN..
-M50 ▲ Medium machining ▲ First choice for steel machining ▲ Universal application ▲ Wide range of applications	 M	**CTCP115-P / CTCP125-P / CTCK110 / CTCK120** CTCP115-P CTCP115-P / CTCP125-P / **CTCK110 / CTCK120**	CTCP115-P / **CTCP125-P** CTCP125-P CTCP115-P / CTCP125-P / **CTCK110 / CTCK120**	CTCP125-P / **CTCP135-P** CTCP135-P CTCP125-P / **CTCK120**	20° 0.010 0.020–0.197	0.005–0.016	CN.. DN.. SN.. TN.. VN.. WN..
-TMQ ▲ Wiper geometry ▲ Light to medium rough machining ▲ Very high feeds ▲ High surface quality	 M	**CTCP115-P** CTCP125-P CTCP125-P	**CTCP125-P** CTCP125-P CTCP125-P		20° 0.011 0.031–0.236	0.008–0.033	CN.. DN.. WN..
-M70 ▲ Light to medium rough machining ▲ Cast crust and forging skin ▲ Stable cutting edge ▲ Interrupted cut ▲ Raw materials and forgings	 M R	**CTCK110 / CTCK120 / CTCP115-P** CTCP115-P **CTCK110 / CTCK120 /** CTCP115-P / CTCP125-P	CTCP115-P / **CTCP125-P** CTCP125-P **CTCK120** / CTCP125-P	**CTCP125-P / CTCP135-P** CTCP135-P CTCP125-P / **CTCK120**	15,7° 0.012 0.059–0.177	0.008–0.031	CN.. DN.. SN.. TN.. WN..
-NMA ▲ Rough machining ▲ Stable cutting edge ▲ For short-chipping materials ▲ First choice for grey cast iron	 R	**CTCK110**	**CTCK110 / CTCK120**	**CTCK120**	0° 0.059–0.177	0.008–0.031	CN.. DN.. SN.. TN.. WN..
-R28 ▲ Single sided roughing geometry ▲ Longitudinal, face and copy turning ▲ Varying depths of cut ▲ Steels with low tensile strength (800 N / mm²) ▲ Good chip control	 R	**CTCP115-P** / CTCP125-P CTCP115-P / CTCP125-P CTCP115-P	**CTCP115-P / CTCP125-P / CTCP135-P** CTCP125-P / CTCP135-P CTCP125-P	**CTCP135-P** CTCP135-P CTCP135-P	20° 0.014 0.039–0.472	0.010–0.031	CN.. DN.. SN..

Standard chip breakers / application notes

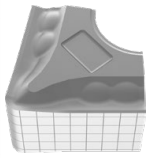
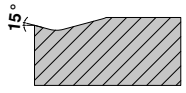
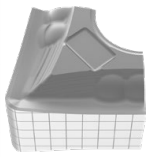
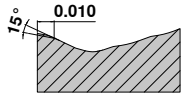
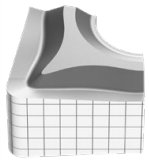
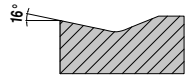
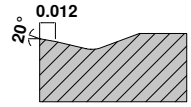
Negative

Main application steel and cast iron, secondary application stainless steels

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-R58 ▲ Single sided roughing geometry ▲ Longitudinal and face turning ▲ Light interrupted cut ▲ Low cutting forces ▲ Unstable machines	 **R**	**CTCP115-P / CTCP125-P** CTCP115-P / CTCP125-P CTCP115-P	**CTCP115-P / CTCP125-P / CTCP135-P** CTCP125-P / CTCP135-P CTCP115-P / CTCP125-P	**CTCP135-P** CTCP135-P CTCP125-P		0.059–0.472	0.012–0.047	CN.. DN.. SN.. TN..
-R88 ▲ Single sided roughing geometry ▲ Longitudinal and face turning ▲ High feedrate ▲ Large depths of cut ▲ Heavily interrupted cut	 **R**	**CTCP115-P / CTCP125-P** CTCP115-P / CTCP125-P CTCP115-P	**CTCP115-P / CTCP125-P / CTCP135-P** CTCP115-P / CTCP125-P CTCP115-P / CTCP125-P	**CTCP135-P** CTCP135-P CTCP125-P		0.138–0.630	0.020–0.059	SN..

Negative

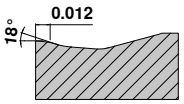
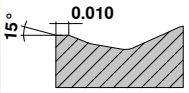
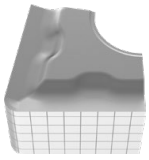
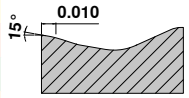
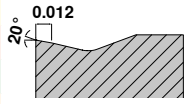
Main application stainless steels, secondary application steel and super alloys

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-F30 ▲ Finishing of stainless steels ▲ Continous cut ▲ High surface quality ▲ Good swarf control	 **F**	CTCM120 / CTPM125 **CTCM120 / CTPM125**	CTCM120 / CTPM125 / CTCM130 **CTCM120 / CTPM125 / CTCM130**	CTCM130 **CTCM130**		0.003–0.098	0.004–0.014	CN.. DN.. SN.. TN.. VN.. WN..
-M30 ▲ Option for stainless steel machining ▲ Good swarf control ▲ Little edg build up ▲ Low cutting forces ▲ Little built-up edge ▲ Applicable on unstable machines	 **F** **M**	CTCM120 / CTPM125 **CTCM120 / CTPM125**	CTCM120 / CTPM125 / CTCM130 **CTCM120 / CTPM125 / CTCM130**	CTCM130 **CTCM130**		0.039–0.177	0.006–0.016	CN.. DN.. SN.. TN.. VN.. WN..
-42 ▲ Extremely soft-cutting chip breaker ▲ For small and medium widths of cut ▲ Suitable for thin-walled parts	 **M**			CTCM130 **CTCM130** CTCM130		0.020–0.177	0.002–0.014	CN..
-M42 ▲ For medium machining on stainless steels ▲ As a secondary application for general steels and super alloys	 **M**			CTCM130 **CTCM130** CTCM130		0.039–0.138	0.006–0.016	DN.. SN.. TN.. WN..

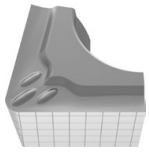
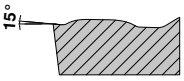
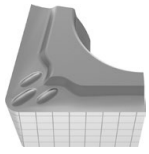
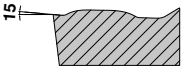
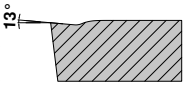
9

Standard chip breakers / application notes

Negative

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
Main application super alloys, secondary application stainless steels						
-M60 ▲ Light to medium roughing ▲ Stable cutting edge ▲ Interrupted cut ▲ Forged skin and cast crust	 M R	CTCM120 / CTPM125 **CTCM120 / CTPM125**	CTCM120 / CTPM125 / CTCM130 **CTCM120 / CTPM125 / CTCM130**	CTCM130 **CTCM130**	 0.059–0.236	0.010–0.020	CN.. DN.. SN.. TN.. WN..
-F34 ▲ Stable, positive cutting edge ▲ Also for slightly interrupted cuts	 F	CTPX710 **CTPX710** CTPX710 **CTPX710**	CTPX710 **CTPX710** CTPX710 **CTPX710**		 0.020–0.098	0.003–0.010	CN.. WN..
-M34 ▲ First choice for superalloys ▲ Light cutting geometry ▲ Little built-up edge ▲ Low cutting forces	 M	**CTPX710** **CTPX710** CTPX710 **CTPX710**	**CTPX710** **CTPX710** CTPX710 **CTPX710**		 0.031–0.118	0.004–0.012	CN.. DN.. SN.. VN.. WN..
-M42 ▲ For medium machining on stainless steels ▲ As a secondary application for general steels and super alloys	 M	**CTCM130** **CTPX710**	**CTCM130** **CTPX710**	**CTCM130**	 0.039–0.138	0.006–0.016	CN.. DN..

Positive

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
Main application steel and cast iron, secondary application stainless steels and super alloys						
-CF05 ▲ Fine finishing ▲ For all common steel materials, stainless steels and GGG ▲ Good swarf control ▲ High surface quality	 F	**CTEP110 / TCM407** CTEP110 CTEP110	TCM10 / TCM407 TCM10 / TCM407		 0.008–0.051	0.002–0.010	CC.. DC.. SC.. TC.. VC..
-SF ▲ Finishing / contour turning ▲ Good swarf control ▲ High surface quality ▲ Low cutting forces	 F	**CTCP115-P**	**CTCP125-P** CTCP125-P	**CTCP125-P / CTCP135-P** CTCP125-P	 0.002–0.098	0.002–0.010	CC.. DC.. SC.. TC.. VC.. WC..
-CF55 ▲ Finishing to medium machining ▲ Suitable for general and stainless steels ▲ Low cutting forces ▲ Good swarf control ▲ High surface quality	 F M	**CTEP110** CTEP110 CTEP110	**TCM10** / CTEP110 CTEP110 CTEP110		 0.008–0.051	0.002–0.010	CC.. DC.. SC.. TC.. VC..

Standard chip breakers / application notes

Positive

Main application steel and cast iron, secondary application stainless steels and super alloys

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-SMF ▲ Finishing to medium machining ▲ Low cutting forces ▲ Good swarf control ▲ High surface quality	**CTEP110 / CTCP115-P** CTEP110 CTEP110	**TCM10 / CTCP125-P / CTCP115-P** CTCP135-P	**CTCP135-P** CTCP135-P	13°	0.008–0.051	0.002–0.010	CC.. DC.. SC.. TC.. VC..
-M23 ▲ Soft cutting geometry with outstanding chip breaking behaviour at low cutting depths in finish machining	**CTCP115-P / CTCP125-P** CTCP115-P / CTCP125-P	**CTCP125-P** CTCP125-P	**CTCP125-P** CTCP125-P	13° 21° 0.006	0.012–0.157	0.039–0.018	RC..
-SM ▲ Medium machining ▲ Universal application ▲ Stable cutting edge ▲ Varying depths of cut ▲ Wide range of applications	**CTCP115-P / CTCP125-P** CTCP115-P / **CTCK110 / CTCK120**	**CTCP125-P / CTCP135-P / CTCP115-P** CTCP135-P CTCP125-P / **CTCK110 / CTCK120**	**CTCP125-P / CTCP135-P** CTCP135-P CTCK120	15° 0.004	0.002–0.197	0.006–0.018	CC.. DC.. RC.. SC.. TC.. VC..
-SMQ ▲ Positive wiper geometry ▲ Finishing to medium machining ▲ Very high feeds ▲ High surface quality	**CTCP115-P** CTCP125-P / CTCP115-P	**CTCP125-P** CTCP125-P	**CTCP125-P** CTCP125-P	15° 0.008	0.039–0.157	0.006–0.018	CC.. DC..

Positive

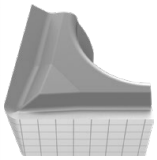
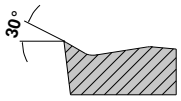
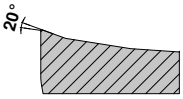
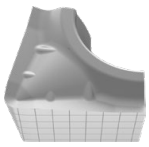
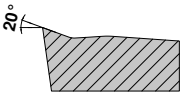
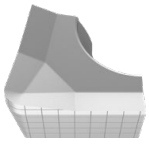
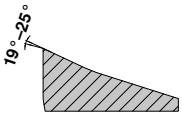
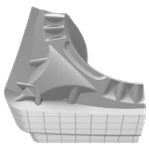
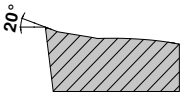
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-F43 ▲ For the light to medium machining of all stainless steels, general steels and superalloys			CTCM130 **CTCM130** CTCM130	10° 0.002	0.020–0.098	0.002-0.010	CC.. DC.. TC..
-M25 ▲ First choice for medium machining of stainless steels ▲ High surface quality ▲ Little built-up edge	CTCM120 / CTPM125 **CTCM120 / CTPM125**	CTCM120 / CTPM125 / CTCM130 **CTCM120 / CTPM125 / CTCM130**	CTCM130 **CTCM130**	10° 0.004–0.006	0.016–0.126	0.004–0.012	CC.. DC.. TC.. VC..
-M55 ▲ First choice for medium machining to roughing of stainless steels ▲ Smooth to lightly interrupted cut ▲ Good swarf control ▲ Stable cutting edge	CTCM120 / CTPM125 **CTCM120 / CTPM125**	CTCM120 / CTPM125 / CTCM130 **CTCM120 / CTPM125 / CTCM130**	CTCM130 **CTCM130**	16° 0.006-0.008	0.016–0.189	0.002–0.014	CC.. DC.. SC.. TC.. VC..

9

Standard chip breakers / application notes

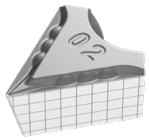
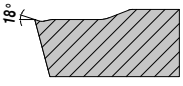
Positive

Main application non-ferrous metals, secondary application stainless steels, steels, super alloys, cast iron

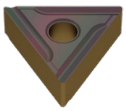
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-23P ▲ Low adhesion ▲ Good chip control with soft aluminium alloys						
	H216T	H216T				CC.. DC..
	H216T	**H216T**	**H216T**			
F	H216T	H216T	H216T	0.008–0.157	0.002–0.012	
-25P ▲ Sharp cutting edge ▲ Good swarf control on soft aluminium alloys ▲ Low adhesion	**CTPX710**	CTPX710				
	**CTPX710**	CTPX710				CC.. DC.. SC.. VC..
	CTPX710 / H216T	**CTPX710 / H216T**	**CTPX710 / H216T**			
F M	**CTPX710**	CTPX710		0.020–0.177	0.002–0.024	
	CTPX710	CTPX710				
-25Q ▲ Wiper geometry ▲ High feeds ▲ High surface quality ▲ Good chip control with softer aluminium alloys ▲ Low adhesion	**CTPX710**	CTPX710				
	**CTPX710**	CTPX710				CC.. DC.. VC..
	H210T	H210T				
	H210T / CTPX710	**H210T / CTPX710**	**H210T / CTPX710**			
M	H210T / **CTPX710**	H210T / CTPX710		0.002–0.256	0.002–0.024	
	H210T	H210T	H210T			
-27 ▲ The universal Alu geometry ▲ Sharp cutting edge ▲ Extremely positive rake angle ▲ Low adhesion ▲ High feed rates	**CTPX715**	CTPX715				
	**CTPX715**	CTPX715				CC.. DC.. RC.. SC.. TC.. VC..
	CTPX715 / H216T	CTPX715 / H216T				
	CTPX715 / H216T	**CTPX715 / H216T**	**CTPX715 / H216T**			
M R	**CTPX715**	CTPX715		0.039–0.394	0.004–0.030	
	CTPX715 / H216T	CTPX715 / H216T	CTPX715 / H216T			
-29 ▲ Direct sintered aluminium geometry ▲ Positive rake angle ▲ Good chip control ▲ For medium to rough machining	CTPX710	CTPX710				
	CTPX710	CTPX710				CC.. DC.. VC..
	CTPX710	**CTPX710**				
	H216T	**H216T**	**H216T**			
M R	CTPX710	CTPX710		0.039–0.236	0.010–0.024	

Positive

Main application super alloys and stainless steels, secondary application steels and non-ferrous metals

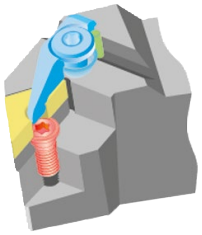
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p inch	Sectional illustration f inch	Geometry
-F05 ▲ Maximum tolerance class ▲ Outstanding chip control, even with the smallest cutting depths ▲ Very low cutting forces	**CTPX710**	CTPX710				
	**CTPX710**	CTPX710				DC.. VC..
	CTPX710	CTPX710				
	CTPX710	**CTPX710**				
	CTPX710	**CTPX710**				
F	CTPX710	CTPX710		0.004–0.098	0.001–0.010	

Supplementary chip breakers / application notes

	Model	Smooth cut	Irregular cutting depth	Interrupted cut
-EN ▲ Universal chip breaker for general steels	 M	**CTCP115-P** CTCP125-P **CTCK110**	**CTCP125-P** CTCP135-P **CTCK120**	**CTCP135-P** CTCP135-P CTCP125-P
-ER | -EL ▲ A problem solver for unstable conditions ▲ Can be used on less powerful machines ▲ Can be used for general steels and on stainless materials as a secondary application	 M		**CTCP125-P**	**CTCP135-P**

Clamping systems

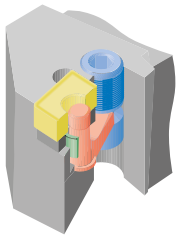
MaxiLock D



- Clamping element
- Inserts
- Insert seat
- Pin
- Screw

The first-choice tool for machining with negative centre-hole inserts. Secure and precise positioning of the indexable insert thanks to the double clamping effect of the clamping element.

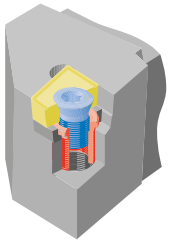
MaxiLock N



- Clamping element
- Inserts
- Insert seat
- Shim
- Lever

This clamping system is suitable for all centre-hole inserts with a negative basic shape. The clamping screw is easy to access from the top and bottom of the holder. When the clamping system is released, there are no loose spare parts.

MaxiLock S

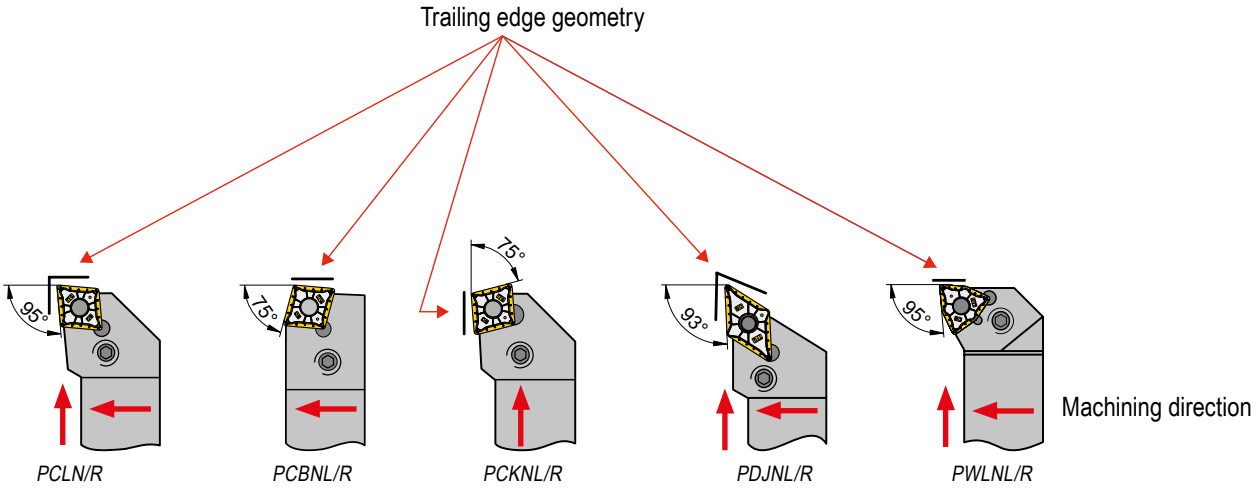


- Clamping element
- Inserts
- Insert seat
- Threaded sleeve

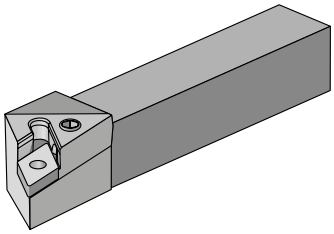
The positive screw clamping guarantees a secure connection between the indexable insert and the tool holder. The chip flow is not disrupted by protruding clamping elements. Thanks to the neutral insert position, the effective available rake angle is identical to the rake angle of the indexable insert.

Trailing edge geometry – information

Through the use of indexable inserts with wiper edge (-TFQ; -TMQ; -SMQ; -25Q) high quality surfaces can be produced economically.

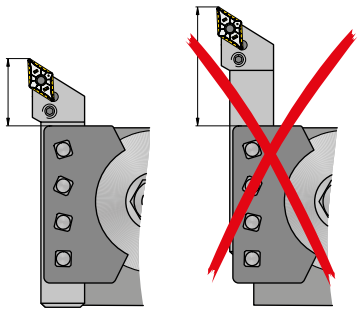


All turning inserts with trailing edge are clamped in standard ISO tool holders

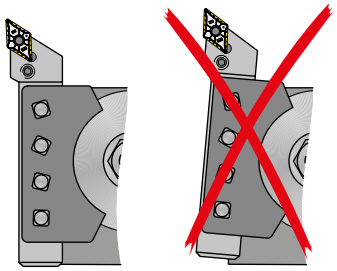


Check toolholder:

- ▲ Insert seat
- ▲ Shim
- ▲ Clamping Lever



Short tool overhang



Ensure correct tool alignment

Feed rate guide values for surface finish quality

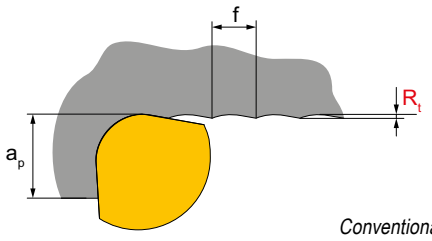
Roughness range R_Z in µm	R_{th}	Corresponds to R_a	Roughness index	ISO 1302	Corner radius r_ε in inch and feed rate f in inch/rev.						
					RE = 0.004"	RE = 0.008"	RE = 0.016"	RE = 0.032"	RE = 0.048"	RE = 0.064"	RE = 0.094"
63–100	$R_{th}63$	12.5–25	N11	25	0.008*	0.012*	0.018*	0.025	0.031	0.035	0.043
40–63	$R_{th}40$	6.3–12.5	N10	12,5	0.007*	0.010*	0.014	0.02	0.024	0.028	0.035
31.5–40	$R_{th}31,5$	4.9–6.3	N9	6,3	0.006*	0.008*	0.013	0.018	0.022	0.025	0.031
25–31.5	$R_{th}25$	4.0–4.9			0.005	0.008*	0.011	0.016	0.019	0.022	0.027
16–25	$R_{th}16$	2.5–4.0	N8	3,2	0.004*	0.006	0.009	0.013	0.015	0.018	0.022
10–16	$R_{th}10$	1.6–2.5			0.004	0.005	0.007	0.01	0.012	0.014	0.017
6.3–10	$R_{th}6,3$	1.0–1.6	N7	1,6	0.003	0.004	0.006	0.008	0.01	0.011	0.014
4–6.3	$R_{th}4$	0.8–1.0	N6	0,8	0.002	0.003	0.004	0.006	0.008	0.009	0.011
2.5–4	$R_{th}2,5$	0.4–0.8	N5	0,4	0.002	0.002	0.004	0.005	0.006	0.007	0.009
1.6–2.5	$R_{th}1,6$	0.2–0.4	N4	0,2	0.002	0.002	0.003	0.004	0.005	0.006	0.007
1–1.6	$R_{th}1$	0.1–0.2	N3	0,1	0.001	0.002	0.002	0.003	0.004	0.004	0.006

Trailing edge geometry – operating principle

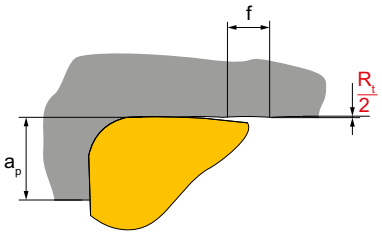
Relationship of feed rate to surface roughness

Improved Surface Quality

With the same feed rate an insert with wiper cutting edge reaches a roughness value R_t which is many times better than a conventional insert.



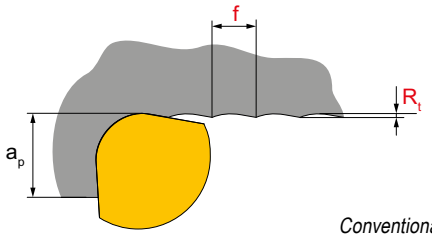
Conventional



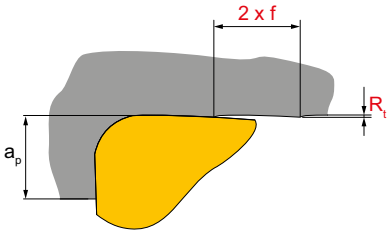
-TFQ

Shorter machining time

To achieve the same R_t-value as with a standard insert, double the feed rate can be applied for the insert with wiper cutting edge **(= shorter production time per component!)**



Conventional



-TFQ

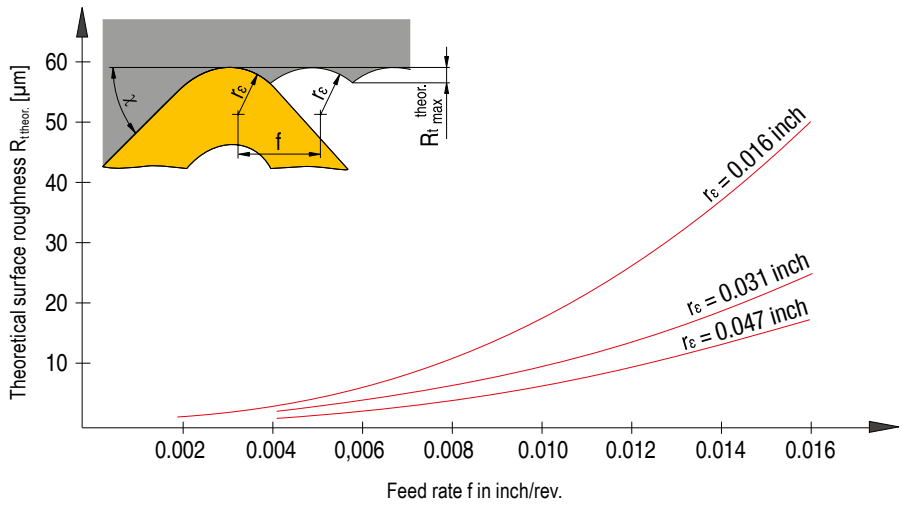
Theoretical Surface Quality

The maximum theoretical surface roughness with turning $Rt_{theor.}$ is the combination of feed rate and corner radius:

$$Rt_{theor.} = \left(r_\varepsilon - \sqrt{r_\varepsilon^2 - \frac{f^2}{4}} \right) \cdot 1000$$

or approximately:

$$Rt_{theor.} = \frac{125 \cdot f^2}{r\varepsilon} \quad [\mu m]$$



ISO designation system for inserts

Indexable inserts – metric

C	N	M	G	12	04	08	E	N	-	M50
1	2	3	4	5	6	7	8	9		13

Indexable inserts – inch

C	N	M	G	4	3	2	E	N	-	M50
1	2	3	4	5	6	7	8	9		13

Indexable inserts, CBN, ceramic – metric

C	N	G	A	12	04	08	S	N	-	020D	_	B	3	-	Q
1	2	3	4	5	6	7	8	9		10		11	12		13

Indexable inserts, CBN, ceramic – inch

C	N	G	A	4	3	2	S	N	-	020D	_	B	3	-	Q
1	2	3	4	5	6	7	8	9		10		11	12		13

1 Insert shape

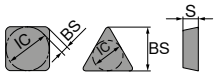
V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

2 Clearance angle

	α		α
A	3°	F	25°
B	5°	G	30°
C	7°	N	0°
D	15°	P	11°
E	20°		

O — Clearance angles not included within the standard for which particular information is necessary.

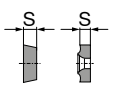
3 Tolerances



	IC±		BS		S	
	mm	inch	mm	inch	mm	inch
A	0,025	.0010	0,005	.0002	0,025	.001
F	0,013	.0005	0,005	.0002	0,025	.001
C	0,025	.0010	0,013	.0005	0,025	.001
H	0,013	.0005	0,013	.0005	0,025	.001
E	0,025	.0010	0,025	.0010	0,025	.001
G	0,025	.0010	0,025	.0010	0,13	.005
J	0,05-0,15*	.002-.006*	0,005	.0002	0,025	.001
K	0,05-0,15*	.002-.006*	0,013	.0005	0,025	.001
L	0,05-0,15*	.002-.006*	0,025	.0010	0,025	.001
M	0,05-0,15*	.002-.006*	0,05-0,20*	.003-.008*	0,13	.005
N	0,05-0,15*	.002-.006*	0,05-0,20*	.003-.008*	0,025	.001
U	0,08-0,25*	.003-.010*	0,13-0,38*	.005-.015*	0,13	.005

* Depends on insert size

6 Insert thickness



		Code	
mm	inch	mm	inch
1,59	1/16	01	1
2,38	3/32	02	1.5
3,18	1/8	03	2
3,97	5/32	T3	2.5
4,76	3/16	04	3
5,56	7/32	05	3.5
6,35	1/4	06	4
7,94	5/16	07	5
9,52	3/8	09	6

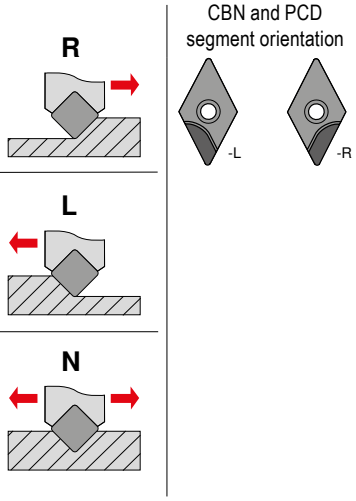
7 Corner radius

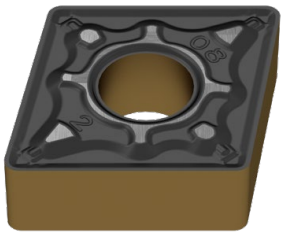
		Code		RN 00 RC MO
mm	inch	mm	inch	
≤ 0,05	.0015	00	X0	
0,1	.004	01	0	
0,2	.008	02	.5	
0,4	1/64	04	1	
0,8	1/32	08	2	
1,2	3/64	12	3	
1,6	1/16	16	4	
2,0	5/64	20	5	
2,4	3/32	24	6	
2,8	7/64	28	7	
3,2	1/8	32	8	

8 Cutting edge

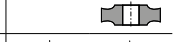
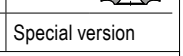
F	Sharp
E	rounded
T	chamfered
S	Chamfered and honed
K	Double-chamfered
P	Double-chamfered and honed
R	Round chamfer

9 Direction of cut





4 Characteristics

N	
R	
F	
A	
M, P	
G, P	
W	
T	
Q	
U	
B	
H	
C	
J	
X	Special version

inch
Change at inscribed circle
IK < 1/4"

IK > 1/4"	IK < 1/4"
N / R / F	E
A / M / G	D
X	X

5 Cutting length

Type	ISO	ANSI	L mm	L inch	IC mm	IC inch
C	06	2	6,4	.250	6,35	.250
	09	3	9,7	.382	9,525	.375
	12	4	12,9	.508	12,70	.500
	16	5	16,1	.634	15,875	.625
	19	6	19,3	.760	19,05	.750
	25	8	25,8	1.016	25,4	1.000
	32	12	35,24	1.269	31,75	1.250
S	06	2	6,35	.250	6,35	.250
	09	3	9,525	.375	9,525	.375
	12	4	12,7	.500	12,7	.500
	15	5	15,875	.625	15,875	.625
	19	6	19,05	.750	19,05	.750
	25	8	25,4	1.000	25,4	1.000
	31	10	31,75	1.250	31,75	1.250
D	07	2	7,7	.303	6,35	.250
	11	3	11,6	.457	9,525	.375
	15	4	15,5	.610	12,70	.500
V	11	2	11,1	.437	6,35	.250
	16	3	16,6	.653	9,525	.375
	22	4	22,10	.870	12,70	.500

Type	ISO	ANSI	L mm	L inch	IC mm	IC inch
T	06	1.2	6,9	.272	3,97	.156
	09	1.8	9,6	.378	5,56	.219
	11	2	11,0	.433	6,35	.250
	16	3	16,5	.650	9,525	.375
	22	4	22,	.079	12,70	.039
	27	5	27,5	1.083	15,875	.625
	33	6	33,0	1.299	19,05	.750
W	06	3	6,5	.256	9,525	.375
	08	4	8,7	.331	12,70	.039
	10	5	10,9	.429	15,875	.625
R	06	2	6,35	.250	6,35	.250
	08	-	8,0	.315	8,0	.315
	09	3	9,52	.375	9,52	.375
	10	-	10,0	.394	10,0	.394
	12*	-	12,0	.472	12,0	.472
	12	4	12,7	.488	12,70	.488
	15	5	15,875	.625	15,875	.625
	16	-	16,0	.630	16,0	.630
	19	6	19,05	.750	19,05	.750
	25	8	25,0	.984	25,0	.984
	25*	-	25,4	1.000	25,4	1.000
	31	10	31,75	1.250	31,75	1.250
	32	-	32,0	1.260	32,0	1.260

* inch version

10 Chamfer type


T / S


K / P [1]

	mm	inch		
015	0,15	.006	A	05°
020	0,20	.008	B	10°
025	0,25	.010	C	15°
050	0,50	.020	D	20°
075	0,75	.030	E	25°
100	1,00	.040	F	30°
			G	35°

1) Two letters are assigned for double-chamfered cutting edges
e.g. BE =
chamfer angle 1 (y_1) = 10°
chamfer angle 2 (y_2) = 25°

11 Number of cutting edges

Single sided

A	
B	
C	
D	
G	
H	

Complete insert thickness

T	
U	
V	
W	
X	
Y	

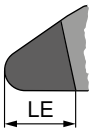
Double sided

K	
L	
M	
N	
P	
Q	

Entire clamping flat

S	
F	
E	

12 Segment length



Approx. specification in mm

13 Grade description

You can find a comprehensive chip breaker overview on → **page 215–221**

9

ISO designation system for tool holders

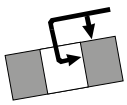
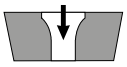
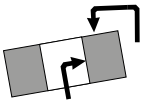
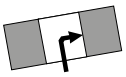
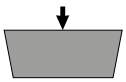
	D	C	L	N	R	1	6	4	D	-
	1	2	3	4	5	6	7	9	8	11
	P	C	L	N	R	20	20	K	12	- T
	1	2	3	4	5	6	7	8	9	10
UT50	-	P	C	L	N	R			-12	
0		1	2	3	4	5	6	7	8	9	10
HSK-T63	-	D	C	L	N	R			-12	
0		1	2	3	4	5	6	7	8	9	10

0 System/size

UT = UTS
according to ISO 26622
UT40 = UTS 40 mm
UT50 = UTS 50 mm
UT63 = UTS 63 mm

HSK-T
according to ISO 12164
HSK-T63 = 63 mm
HSK-T100 = 100 mm

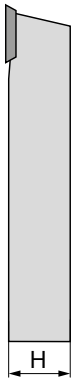
1 Tool holder

D  Retained from above and via bore	**S**  Retained via centre screw
M  Retained from above and via bore	**P**  Retained via the bore
C  Retained from above	**X** Special version

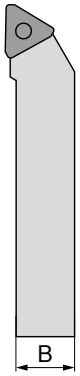
2 Insert shape

V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

6 Shank height

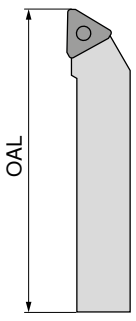


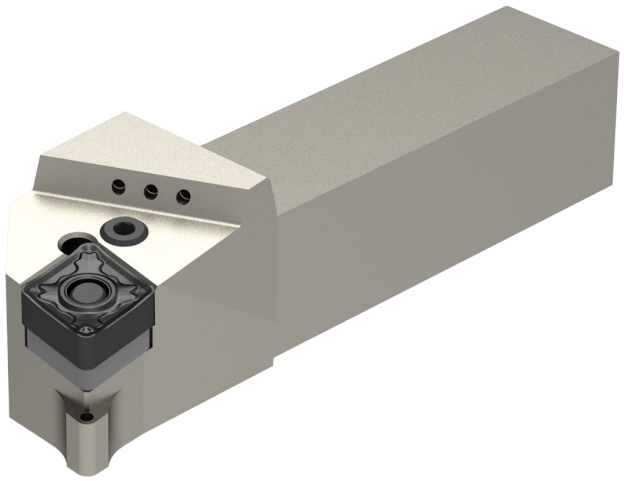
7 Shank width



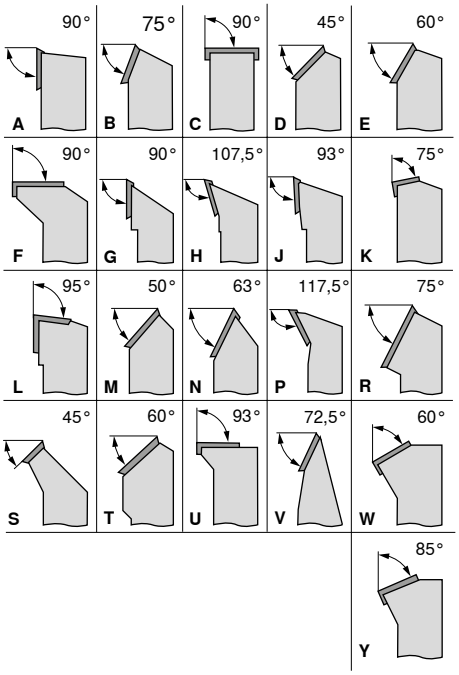
8 Tool length

OAL			OAL		
mm	inch		mm	inch	
32	4.000	**A**	160	4.500	**N**
40	4.500	**B**	170	5.500	**P**
50	5.000	**C**	180	–	**Q**
60	6.000	**D**	200	6.000	**R**
70	7.000	**E**	250	7.000	**S**
80	8.000	**F**	300	8.000	**T**
90	5.500	**G**	350	5.500	**U**
100	5.625	**H**	400	3.500	**V**
110	5.300	**J**	450	3.500	**W**
125	14.000	**K**	500	3.750	**Y**
140	6.800	**L**	Special version		**X**
150	4.400	**M**			

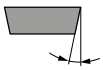




3 Style

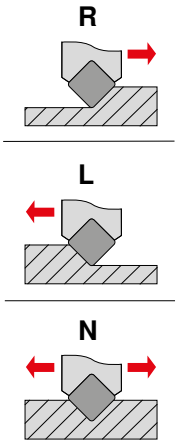


4 Clearance angle

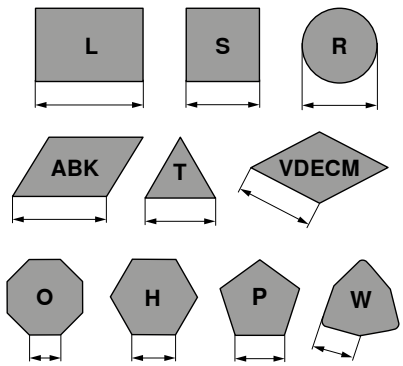


	α		α
A	3°	F	25°
B	5°	G	30°
C	7°	N	0°
D	15°	P	11°
E	20°		
O	Clearance angles not included within the standard for which particular information is necessary.		

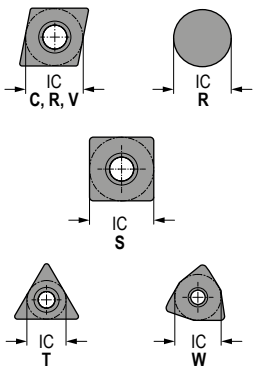
5 Direction of cut



9 Cutting length



Inch inscribed circle dimensions



1.2	=	5/32
1.5	=	3/16
1.8	=	7/32
2	=	1/4
2.5	=	5/8
3	=	3/8
4	=	1/2
5	=	5/8
6	=	3/4
8	=	1
10	=	1 1/4

10 Manufacturer specification

T = Toggle
Special length (mm)
Insert thickness (deviating from standard)
Special version (X..)
Machine manufacturer (specific)
DC = DirectCooling

11

When required a supplementary symbol of maximum 3 letters may be added to the ISO code, separated by a dash, for example: W for wedge design.

ISO designation system for boring bars

		A	25	R		P	C	L	N	R	12	
		1	2	3		4	5	6	7	8	9	10
UT40	-		25	G	-	P	C	L	N	R	- 12	
0		1	2	3		4	5	6	7	8	9	10
HSK-T63	-		50	Q	-	D	C	L	N	R	- 12	
0		1	2	3		4	5	6	7	8	9	10

0 System/size

UT = UTS
according to ISO 26622
UT40 = UTS 40 mm
UT50 = UTS 50 mm
UT63 = UTS 63 mm

HSK-T
according to ISO 12164
HSK-T63 = 63 mm
HSK-T100 = 100 mm

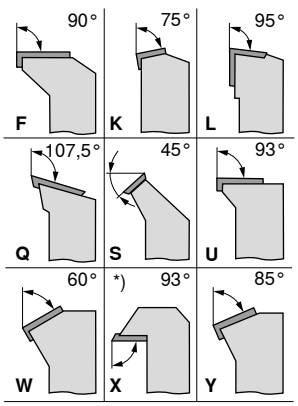
1 Shank type

S	Steel shank	**E**	As C with coolant hole
A	Steel shank with coolant hole	**F**	As C with antivibration system
B	Steel shank with antivibration system	**G**	As C with coolant hole and antivibration system
D	Steel shank with coolant hole and antivibration system	**H**	Heavy metal
C	Carbide shank with steel head	**J**	Heavy metal with coolant hole

5 Insert shape

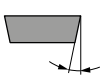
V	35°	Included angle	
D	55°		
E	75°		
C	80°		
M	86°		
K	55°	Included angle	
B	82°		
A	85°		
L	90°		Other shapes
P	108°		
H	120°		
O	135°		
R	-		
S	90°		
T	60°		
W	80°		

6 Style

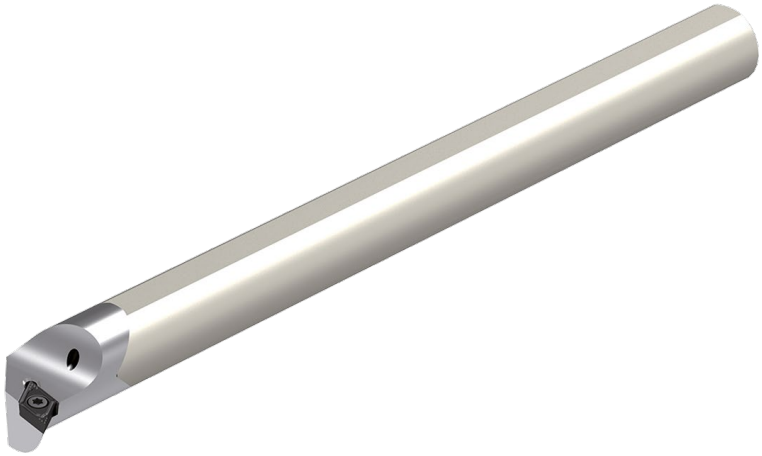


*) CERATIZIT factory standard

7 Clearance angle

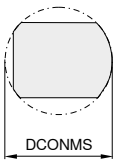


	α		α
A	3°	**F**	25°
B	5°	**G**	30°
C	7°	**N**	0°
D	15°	**P**	11°
E	20°		
O	Clearance angles not included within the standard for which particular information is necessary.		



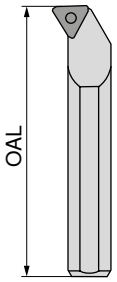
2 Shank type & size

DCONMS mm	DCONMS inch
08	A two-digit figure indicating the boring bar diameter in 1/16 of an inch.
10	
12	
16	
20	
25	
32	
40	
50	
60	

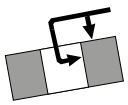
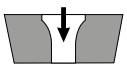
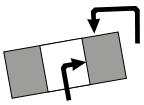
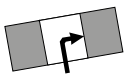
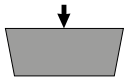


3 Tool length

OAL mm	OAL inch	
80	3	F
100	3,5	H
110	4	J
125	4,5	K
140	5	L
150	5,5	M
160	6	N
170	6,5	P
180	6,75	Q
200	7	R
250	8	S
300	10	T
350	12	U
400	14	V
450	16	W
500	18	Y
	20	
Special version		X

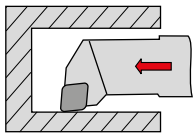


4 Clamping method

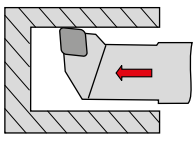
D  Retained from above and via bore	**S**  Retained via centre screw
M  Retained from above and via bore	**P**  Retained via the bore
C  Retained from above	**X** Special version

8 Direction of cut

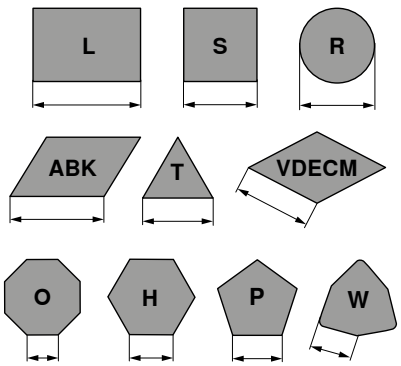
R



L



9 Cutting length



10 Manufacturer specification

T = Toggle
Special length (mm)
Insert thickness (deviating from standard)
Special version (X..)
Machine manufacturer (specific)

Types of wear

Wear on clearance face

Abrasion on flank: normal wear after a certain machining time

Cause
- Too high cutting speed
- Carbide grade with too low wear resistance
- Feed rate not adapted

Remedy
- Reduce cutting speed
- Use grade with higher wear resistance
- Adapt feed rate to cutting speed and cutting depth

Edge chipping

Through excessive mechanical stress at the cutting edge fracture and chipping can occur.

Cause
- Grade with too high wear resistance
- Vibration
- Too high cutting speed and / or feed rate
- Interrupted cut
- Swarf damage

Remedy
- Use tougher grade
- Use negative cutting edge geometry with chip groove
- Improve stability (tool, work piece)

Cratering

The hot chip which is being evacuated causes cratering at the rake face of the cutting edge.

Cause
- Too high cutting speed and / or feed rate
- Rake angle too shallow
- Grade with insufficient wear resistance
- Insufficient coolant supply

Remedy
- Reduce cutting speed and / or feed rate
- Use grade with higher wear resistance
- Increase coolant quantity and / or pressure, optimise coolant supply
- Use grade which is more resistant to cratering

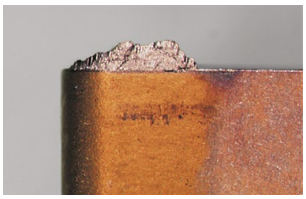
Plastic deformation

High machining temperature and simultaneous mechanical stress can lead to plastic deformation.

Cause
- Too high machining temperature resulting in softening of substrate
- Damage of coating
- Grade with insufficient wear resistance
- Insufficient coolant supply

Remedy
- Reduce cutting speed
- Use grade with higher wear resistance
- Provide cooling

Built-up edge



Built-up material / edges occur when the chip is not evacuated properly due to insufficient cutting temperature.

Cause
- Insufficient cutting speed
- Rake angle too shallow
- Wrong cutting material
- Lack of cooling / lubrication

Remedy
- Increase cutting speed
- Increase rake angle
- Apply TiN coating
- Use emulsion with higher concentration

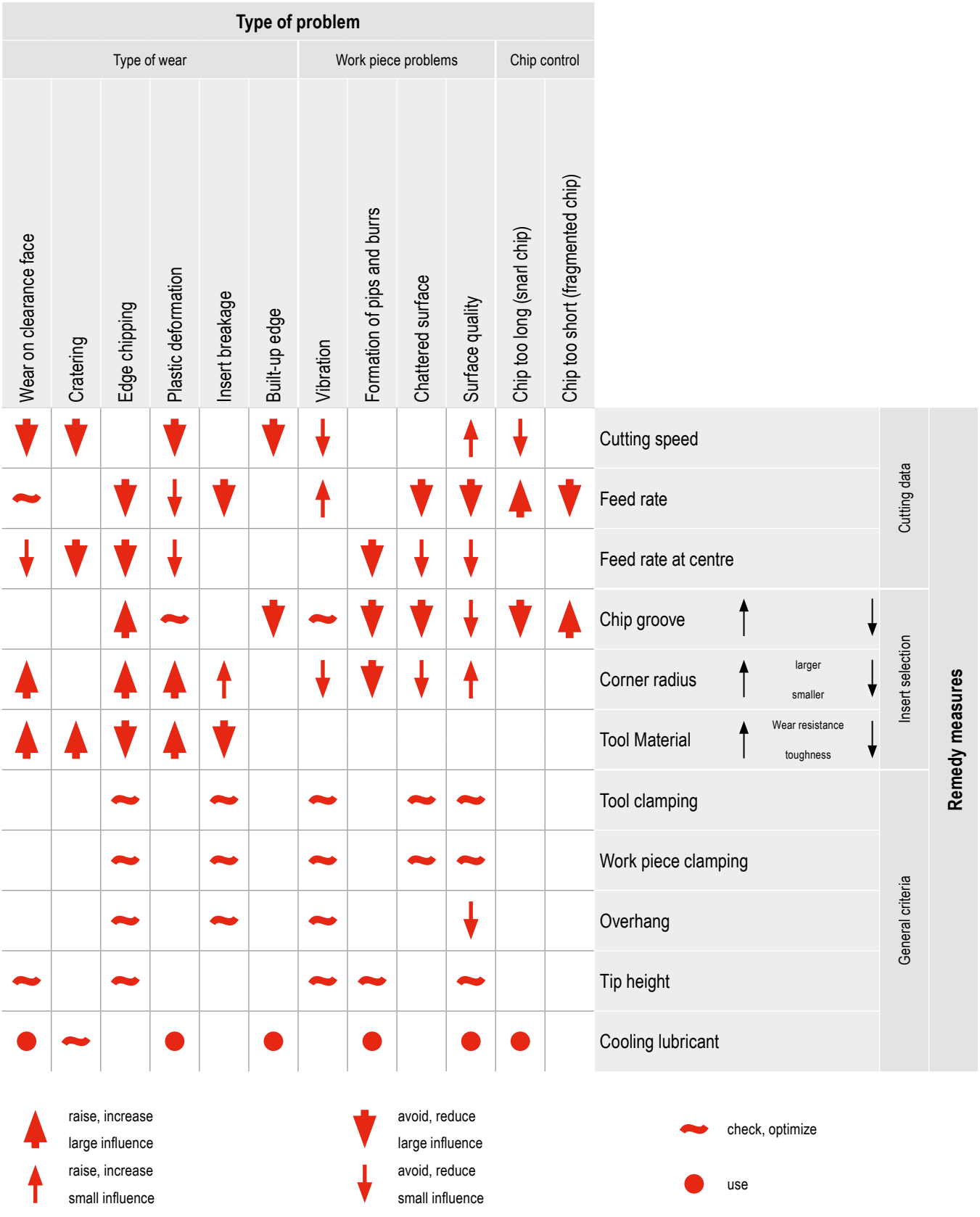
Insert breakage

Excessive stress of the insert causes breakage.

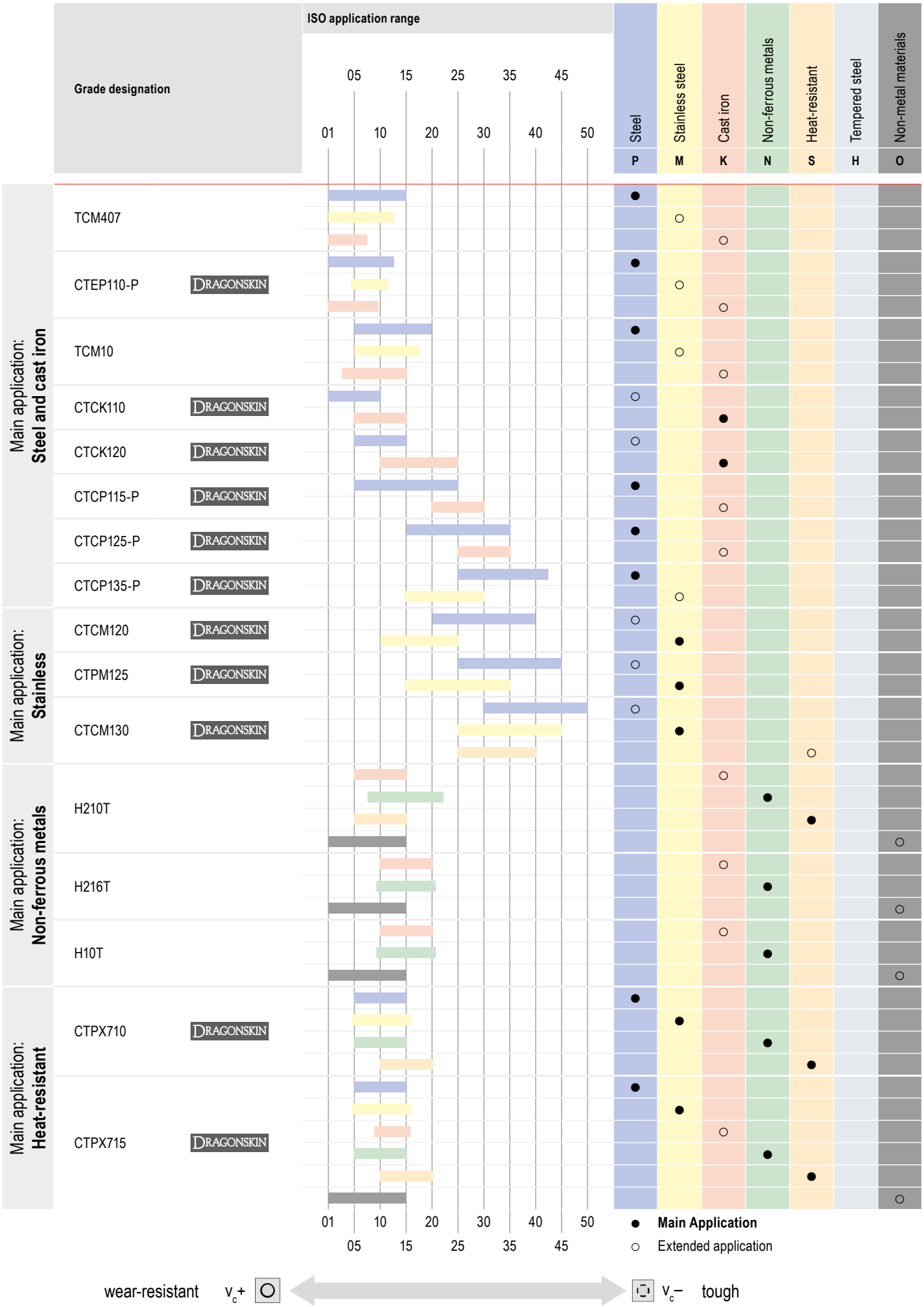
Cause
- Excessive stress of cutting material
- Lack of stability
- Clearance angle too small

Remedy
- Use tougher grade
- Use protective edge chamfer
- Increase edge hone
- Use geometry with higher stability

Recommendation for Optimum Results



Grades Overview



Grade description

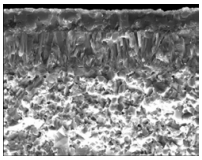
TCM407

ISO | **P10** | M05 | K05

Specification:
Composition: Co 8.0%; WC 16.0%; TaNbC 10.0%; TiCN balance | Grain size: 2-3 µm | Hardness: HV30 1760

Usage recommendation:
The uncoated cermet grade for fine finishing steel materials.

CTEP110-P



ISO | **P10** | M10 | K05

Specifications:
Composition: Co/Ni 12.2%; additives 26.4%; Ti(C,N) balance | Grain size: 0.8-1.0 µm | Hardness: HV_{30} 1650 | Layer system: CVD TiCN-Al_2O_3 + TiN cover layer

Recommended use:
Coated cermet grade with reserves of toughness for finish machining at high cutting speeds.

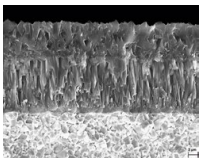
TCM10

P15 | K10

Specification:
Composition: Cermet Co/Ni 12,2%; WC 15,0%; TaNbC 10,0%; TiCN balance | Grain size: 2-3 µm | Hardness: HV_{30} 1650

Usage recommendation:
The uncoated cermet grade for finishing steel, stainless steel and tempered steel.

CTCK110

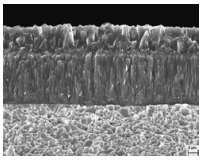


ISO | P10 | **K10**

Specification:
Composition: Co 5.0%, mixed carbides 2.0%, WC balance | Grain size: 1-2 µm | Hardness: HV30 1730 | Layer system: CVD TiCN-Al2O3

Usage recommendation:
The wear-resistant grade for machining cast iron materials and steels at high cutting speeds with a continuous cut.

CTCK120

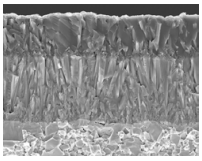


ISO | P20 | **K20**

Specification:
Composition: Co 6.0%; TaC 2.0%; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1630 | Coating specification: CVD TiCN-Al_2O_3

Recommended application:
The grade for cast iron machining with high toughness reserves for difficult conditions and interrupted cut

CTCP115-P

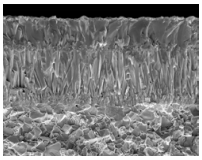


ISO | **P15** | K25

Specification:
Composition: Co 5.5%; mixed carbides 6.4%; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1530 | Layer system: CVD TiCN-Al_2O_3

Usage recommendation:
The wear-resistant high-performance grade for steel machining with stable conditions and a continuous cut.

CTCP125-P

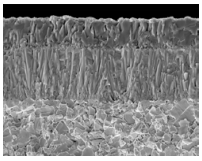


ISO | **P25** | K30

Specification:
Composition: Co 7.0%, mixed carbides 6.0%, WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1500 | Layer system: CVD TiCN-Al_2O_3

Usage recommendation:
The first choice for the universal machining of steels.

CTCP135-P



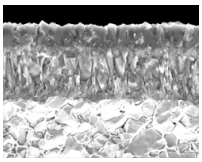
ISO | **P35** | M25

Specification:
Composition: Co 9.6%, mixed carbides 7.8%, WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1460 | Layer system: CVD TiCN-Al_2O_3

Usage recommendation:
The tough alternative for extremely interrupted cutting conditions.

Grade description

CTCM120

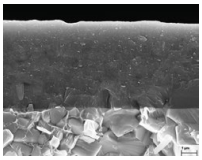


ISO | P15 | **M20**

Specification:
Composition: Co 7%, mixed carbides 6%, WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1500 | Layer system: CVD TiCN-Al_2O_3

Usage recommendation:
Wear-resistant carbide grade for austenitic, stainless steel with the best levels of performance with a smooth cut.

CTPM125

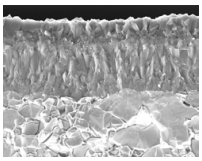


ISO | P35 | **M25**

Specification:
Composition: Co 9.6%; mixed carbides 7.8%; others 0.4%; WC balance | Grain size: 1 - 2 µm | Hardness: HV_{30} 1460 | Coating specification: PVD TiAlTaN

Recommended application:
The first choice for the machining of austenitic steels

CTCM130

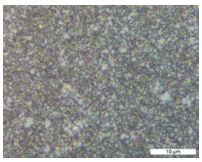


ISO | P25 | **M30** | S30

Specification:
Composition: Co 9.6%, mixed carbides 7.8%, WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1460 | Layer system: CVD TiCN-Al_2O_3

Usage recommendation:
Robust turning grade for austenitic stainless steel with interrupted cuts.

H210T



ISO | K10 | **N10 | S10** | O10

Specification:
Composition: Co 6.0%; WC balance | Grain size: 0.8 µm | Hardness: HV_{30} 1850

Recommended application:
The wear-resistant uncoated carbide grade for the machining of aluminium and other non-ferrous metals.

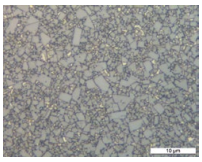
H10T

ISO | K15 | **N15** | S15 | O10

Specification:
Composition: Co 6.0%; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1630

Recommended application:
The uncoated carbide grade for the machining of aluminium and other non-ferrous metals

H216T

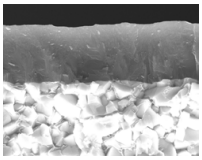


ISO | K15 | **N15** | S15 | O10

Specification:
Composition: Co 6.0%; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1630

Recommended application:
The uncoated carbide grade for the machining of aluminium and other non-ferrous metals

CTPX710

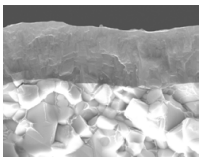


ISO | **P10 | M10** | K10 | **N10 | S15**

Specification:
Composition: Co 6.0%; WC balance | Grain size: 0.8 µm | Hardness: HV_{30} 1820 | Layer system: PVD AlTiN

Usage recommendation:
The universal carbide grade for the most demanding machining requirements on multiple materials.

CTPX715



ISO | **P15 | M15** | K15 | **N15 | S20** | O10

Specification:
Composition: Co 6.0%; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1650 | Layer system: PVD AlTiN

Usage recommendation:
The universal carbide grade for the most demanding machining requirements on multiple materials.

Grade description