It couldn't be easier
Ordering via the Online Shop
http://cuttingtools.ceratizit.com

Competent advice also available on call
Application engineers with know-how
Monday to Friday from 8:00 am – 6:00 pm

Placing your order is quick and easy
Customer Service Centre
Freephone Number: 0800 073 2073
Freefax Number: 0800 073 2074

VALID: 01.09.2022 – 30.11.2022

CERATIZIT GROUP

Chip control Specialist

The new slot milling cutter MaxiMill – Slot SX

SPECIAL SELECTION

TEAM CUTTING TOOLS

CUTTING SOLUTIONS BY CERATIZIT · KOMET · WNT · KLENK

CERATIZIT is a high-technology engineering group specialized in cutting tools and hard material solutions.

Tooling the Future

www.ceratizit.com

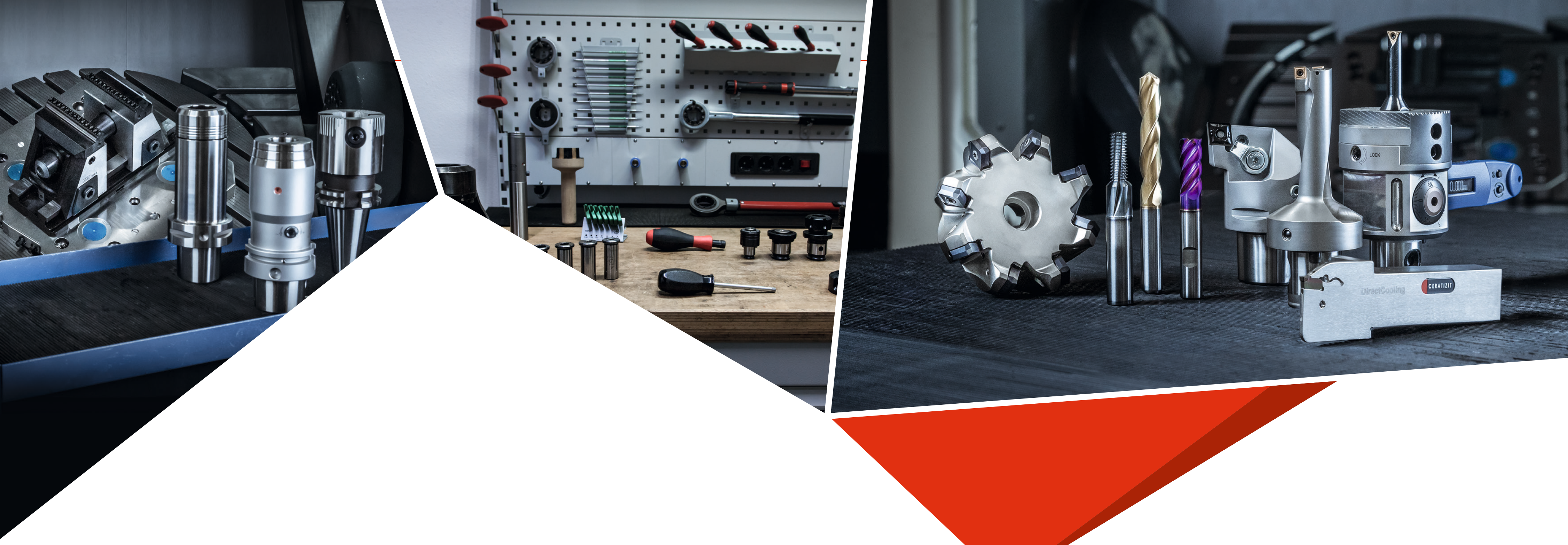


TABLE OF CONTENTS

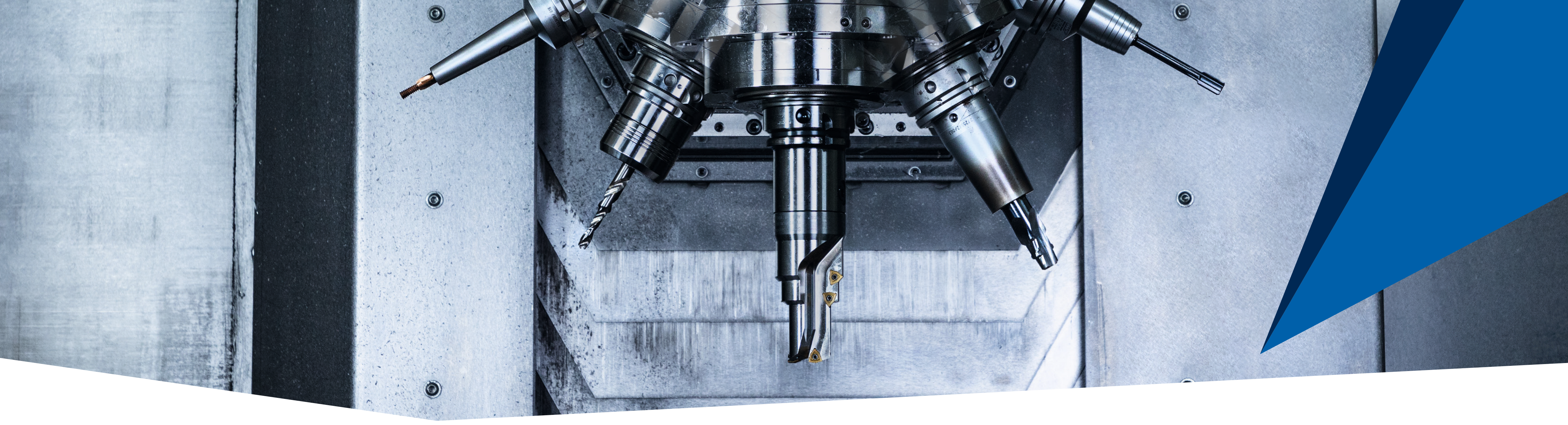
Colour code information

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

TRADE COUNTER SHEFFIELD

TCS

When you see this logo
it´s in stock in Sheffield



SEMI-STANDARD SOLID DRILLING AND BORING

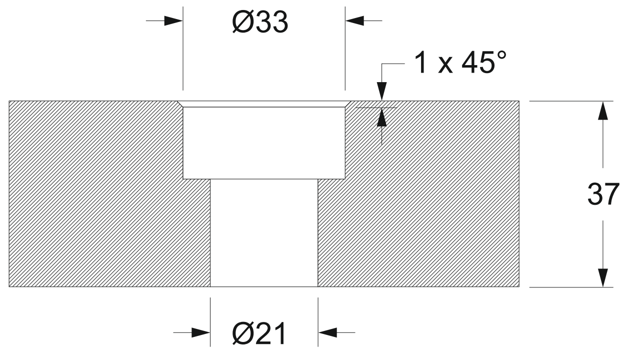
Total savings	3 min / Part
Total savings	**£ 300** / Tool

Conventional machining

Drilling / milling / countersinking

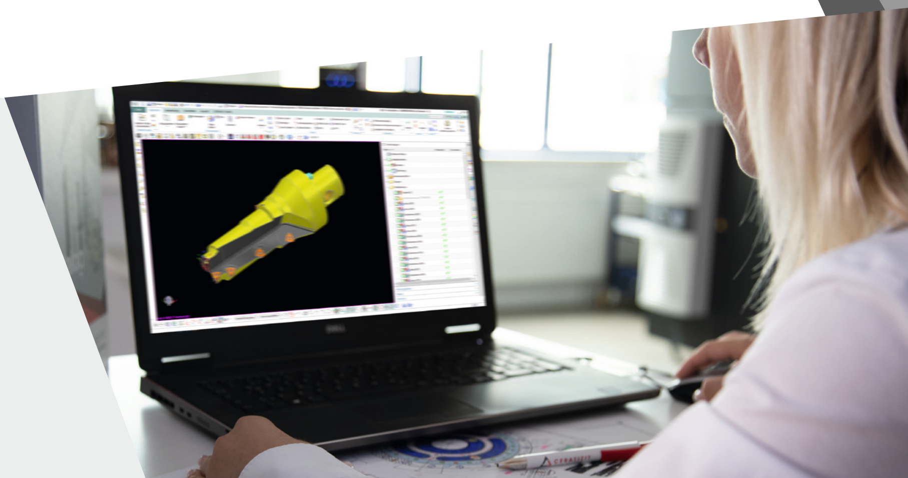
Combined machining

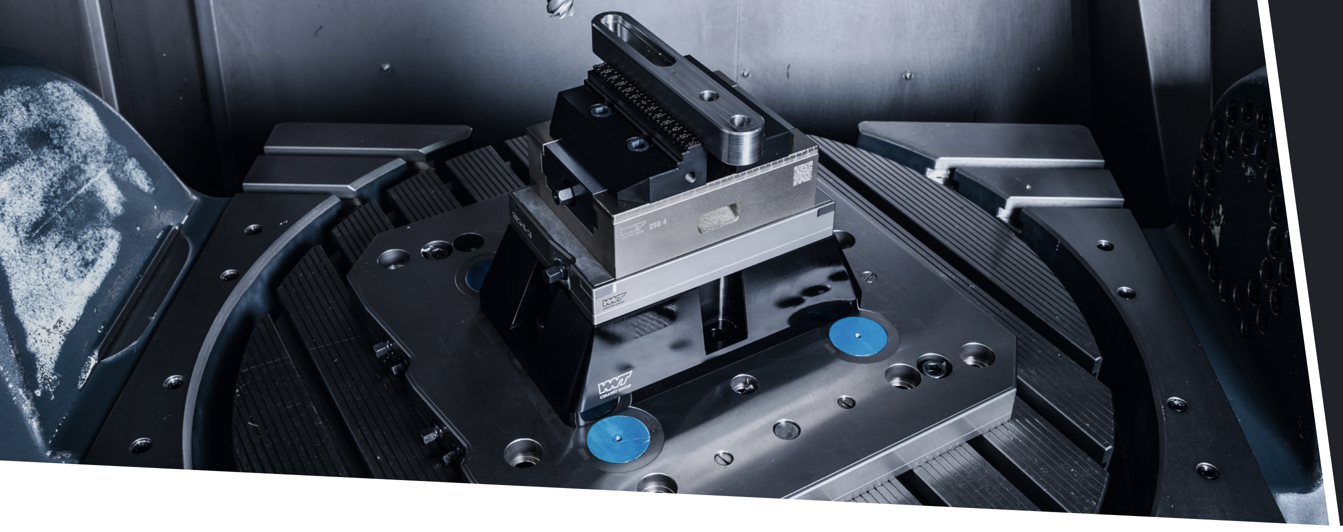
- **Shorter process times** due to high-performance parameters
- **Ideal positioning accuracy** increases the quality of the hole produced across all steps
- **Reduces the need for tool changes** due to combined machining



Current solution: Drilling, Milling, Chamfering	**4 min**	With CERATIZIT Semi-Standard	**1 min**
Total tool price	**£ 700**	Total tool price	**£ 400**

Contact our technical team on 0800 0732075 for quotation.





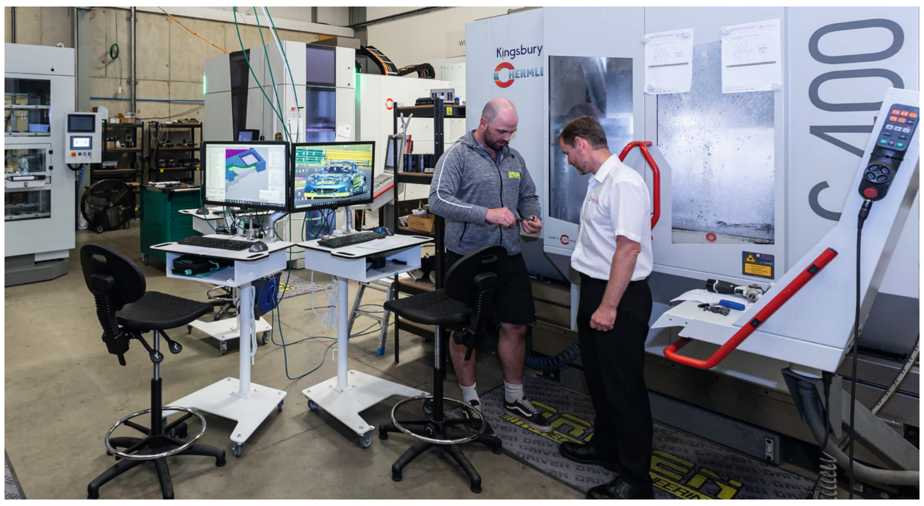
The WNT ZSG4 vices supplied by CERATIZIT UK & Ireland are ideal for the multi-pallet production at Driven Engineering.

DRIVEN TO SUCCEED – WITH A LITTLE HELP FROM CERATIZIT WORKHOLDING

In under seven years, Driven Engineering has grown from a one-man operation with just a second hand three-axis machining centre has grown into a thriving sub-contract manufacturing business on the back of founder Ray Harris's commitment to invest in the company's future.

Within six months of buying that first second hand machine in 2015 Ray Harris had extended his machining capacity to include five-axis capability, within a further 12 months he, still operating as a one-man business, invested in brand new Hermle machining centre, which was followed in 2019 with a further machine with a 12 position, 320 x 320 mm pallet system. Taking a short pause for consolidation, it was in 2021, in the middle of the pandemic, that he decided more space was required so a relocation to its current Havant facility took place. At the same time an order was placed for a second pallet loaded machine, this time with 50 pallets and 240 x 170 m capacity. In total the company has invested around £1.3 million in machining capacity to create a 24/7 operation, along with supporting systems such as Hypermill software to enhance productivity. Quality control is also a focus with existing measuring arms being supplemented with future investment in a CMM.

"Making the decision to relocate amidst the pandemic wasn't ideal, but it was a positive one that needed to be taken. We completed the move in eight days ensuring minimum impact of workload and cashflow," says Ray Harris. "At the same time we also ordered the second pallet loaded machine. The smaller pallets suit the work we do in the motorsport sector and having the multiple pallets allows for lights-out machining. We now have capacity to run for an entire weekend unmanned."



CERATIZIT's Lee Pinhorne discussing tooling applications with Driven Engineering Production Engineer Rob Lewis.

The type of components machined by Driven Engineering lend themselves to be gripped in vices, rather than fixtures, which is where CERATIZIT UK & Ireland plays its part. In addition to providing cutting tools, it has also been instrumental in kitting out the pallets with its latest ZSG4 vice system. The ZSG4 vice has several benefits, but key to Driven Engineering is the ability to grip billets on just 3 mm of material. "Using such a small amount of material for gripping allows us to program the part using the bottom of the billet as the datum, we also get great access to machine five sides of the part. In addition, they deliver consistent grip and accuracy making them ideal for unmanned machining."

In total CERATIZIT has supplied Driven Engineering with 75 ZSG4 centric vices, in a combination of 125 mm and 80 mm widths. Each vice is capable of applying up to 35 kN of gripping force, which allows the minimum grip depth of 3 mm. A further advantage is the lack of any requirement for billet preparation prior to gripping, unlike other systems on the market. Their suitability for pallet-based machining is enhanced by their compatibility with PNG, MNG and Lang zero point clamping systems.

Driven Engineering's core business is in support of the motorsport sector, due in part to Ray Harris's own racing ambitions where he has manufactured parts for a Ginetta G55 car he races in the British Endurance Championship and his own car that he competes with in the Intermarque Silhouettes championship. Outside of parts for these cars Driven Engineering was also involved in the development project for the HALO devices found on many open cockpit racing cars. These complex parts were machined using CERATIZIT's CCR, HFC and SilverLine (ball-nose) cutters. "We benefit from CERATIZIT's online support and face-to-face interaction in order to generate the correct cutting data, with our local technical Sales Representative, Lee Pinhorne, on-hand to support us with new projects. This is especially valuable as we diversify into other sectors of the market, and encounter materials that we haven't machined before," says Ray Harris. "Further support is provided by the CERATIZIT tool vending system that Driven Engineering has installed. This helps to maintain production, with tools being available 24/7."

The Intermarque Silhouette racecar driven by Ray Harris.

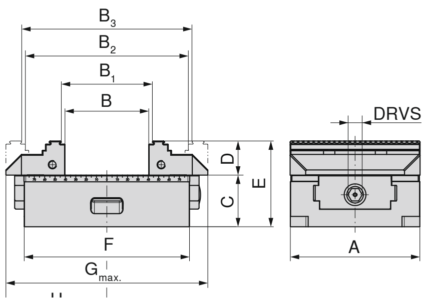
Customer case study featured products

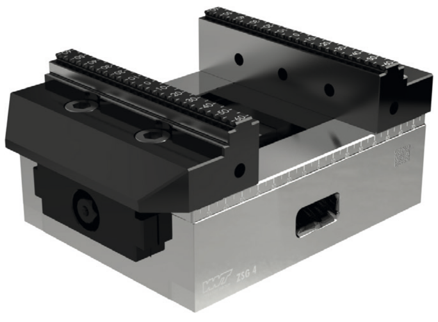
CentriClamp – ZSG 4

- ▲ Sealed centric vice
- ▲ With grip jaws, 3 mm
- ▲ Ball bearing mounted spindle
- ▲ ± 0.01 mm repeatability
- ▲ Suitable for PNG and MNG

ZSG 4 **WNT** \ Standard

TCS





A mm	B mm	B1 mm	B2 mm	B3 mm	C ±0,01 mm	D mm	E mm	F mm	Gmax. mm	H mm	DRVS mm	MXC kN	WT kg	80 878 ... PG Y4	£	£
80	0 - 59	4 - 63	59 - 117	63 - 121	50	28	78	130	157	81	12	25	3.9	**08700**	~~890.20~~	650.00
80	0 - 123	4 - 127	59 - 181	63 - 185	50	28	78	190	206	104	12	25	5.5	**08800**	~~1,019.00~~	750.00
125	0 - 80	8 - 87	77 - 156	84 - 163	50	33	83	160	208	111	12	35	8.7	**15300**	~~1,123.00~~	850.00

Base plate, round

TCS

80 899 ... PG Y4	£	£
125	~~549.22~~	380.00

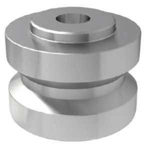
MNG indexing bolt

TCS

80 899 ... PG Y4	£	£
51500	~~20.40~~	11.00

MNG pull studs

TCS



80 899 ... PG Y4	£	£
025	~~45.83~~	32.00

It is not possible to fit top jaws with a height of 40 mm, if this height is required, please use the reversible jaws with D = 40 mm (Article No. 80 878 520).

Special Offer / **Any of the ZSG4 vices + base plate + pull stud + dowel** **= £ 1000**

CircularLine – End milling cutter

- ▲ Chip breaker 0.9 x DC
- ▲ 53 585 ... Cutting depth: 2 x DC
- ▲ 53 587 ... Cutting depth: 3 x DC

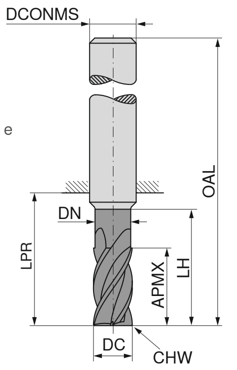
CCR UNI

$\lambda_s = 30° / 31°$, $\gamma_s = 8°$

ZEFP

HPC

WNT \ Performance



DPX72S DRAGONSKIN

DPX72S DRAGONSKIN

Factory standard HB

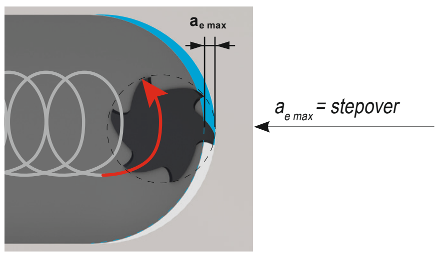
Factory standard HB

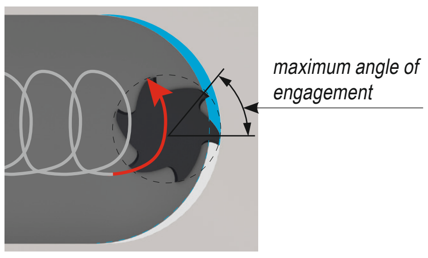
DC e8 mm	OAL mm	APMX mm	DN mm	LH mm	LPR mm	DCONMS h6 mm	CHW mm	ZEFP	53 585 ... PG V1	£	£	53 587 ... PG V1	£	£
6	57	13	5.8	19	21	6	0.2	6	**060**	~~59.17~~	38.46			
6	63	19	5.8	25	27	6	0.2	6				**060**	~~58.00~~	37.70
8	63	21	7.7	25	27	8	0.2	6	**080**	~~77.16~~	50.15			
8	71	25	7.7	33	35	8	0.2	6				**080**	~~75.26~~	48.92
10	72	22	9.7	30	32	10	0.2	6	**100**	~~99.14~~	64.44			
10	83	31	9.7	41	43	10	0.2	6				**100**	~~106.11~~	68.97
12	83	26	11.6	36	38	12	0.2	6	**120**	~~127.49~~	82.87			
12	94	37	11.6	47	49	12	0.2	6				**120**	~~124.62~~	81.00
16	92	36	15.5	42	44	16	0.2	6	**160**	~~254.31~~	165.30			
16	111	49	15.5	61	63	16	0.2	6				**160**	~~257.89~~	167.63
20	104	41	19.5	52	54	20	0.2	6	**200**	~~365.63~~	237.66			
20	127	61	19.5	75	77	20	0.2	6				**200**	~~361.54~~	235.00

	53 585 ...	53 587 ...
P	●	●
M	○	○
K	●	●
N		
S	○	○
H		
O		

Trochoidal milling

When programming the various CAM systems different information is required.





Features & benefits of trochoidal milling

- ▲ reduced tool wear
- ▲ higher material removal rate than HPC machining possible
- ▲ spindle and machine-friendly
- ▲ suitable for low-power machines
- ▲ suitable for thin-walled components and unstable workpiece clamping

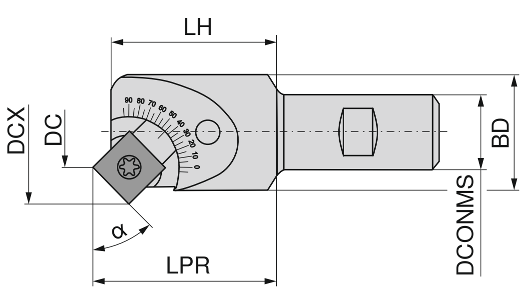
Calculation of the average chip thickness

$$h_m \approx f_z \sqrt{\frac{a_e}{DC}}$$

$$f_z \approx h_m \sqrt{\frac{DC}{a_e}}$$

$a_{e\,max}$ = maximum lateral infeed (depending on the material to be machined)
f_z = maximum feed per tooth
h_m = average chip thickness
DC = tool diameter

Adjustable single angle milling cutter C 4500



Designation	DCONMS mm	DC mm	DCX mm	LH mm	BD mm	LPR mm	50 690 ...	PG 2B/40 £	£
C490.20.R.01	16.0	1.6–11.1	20.1–23.6	32.0	18.65	23.9–34.6	01600	~~150.62~~	100.00
C490.26.R.01	20.0	1.1–14.1	26.6–31.5	37.0	25.00	38.2–40.6	02000	~~176.76~~	120.00

UltraMini – Set

- ▲ internal turning, grooving and chamfering

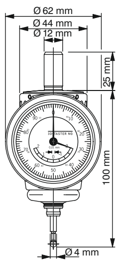
	73 085 ...	PG Y5 £	£
Set	999	~~1,050.88~~	230.00

Universal 3D-Tester HQ

- ▲ fast and accurate positioning at reference edges
- ▲ characterised by over travel safety
- ▲ accuracy 0,01 mm

Scope of supply

3D tester including tracer insert and Allen key



	85 292 ...	PG XX £	£
Universal 3D-Tester HQ	100	~~364.17~~	220.00

Zero height setting gauge

Designation	Height mm	85 900 ...	PG Y7 £	£
Zero height setting gauge	100	018	~~231.88~~	75.00

Assembly device for ISO adapters

- ▲ Aluminium

Collet chuck	80 720 ...	PG Y7 £	£
SK 30	030	~~219.96~~	55.00
SK 40	040	~~219.96~~	60.00
SK 50	050	~~365.93~~	65.00

Twist drill sets DIN 338 – Type N short

	ø mm	10 158 ...	PG T2 £	£
0.1 mm steps	1.0–5.9	050	~~80.23~~	35.00
0.1 mm steps	6.0–10	100	~~166.66~~	70.00

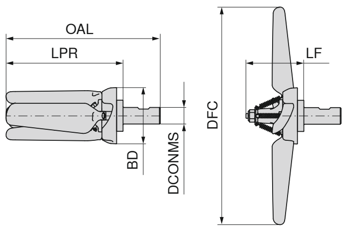
Countersink 90°, DIN 335-C

- ▲ included in the set:
  6.3 mm, 8.3 mm, 10.4 mm, 12.4 mm,
  16.5 mm and 20.5 mm

	30 100 ...	PG U1 £	£
Set	999	~~120.72~~	30.00

Cleaning propeller

- ▲ Chip and emulsion removal or drying processes via the tool spindle
- ▲ Simple replacement of the rotor blades



IK central

DCONMS **mm**	OAL mm	LPR mm	LF mm	DFC mm	BD mm	RPMX 1/min.	80 399 ...	PG Y7 £	£
20	186.3	141.3	69.75	254	67.68	5000 - 8000	02000	~~472.70~~	135.00

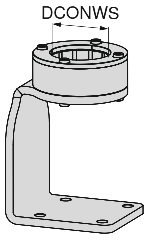
Rotor blade

Rotor blade kit

Spare parts for Article no.	80 399 ... £	PG Y7 £		80 399 ... £	PG Y7 £	
80 399 02000	~~57.99~~	25.00	30100	~~224.11~~	100.00	30200

Assembly fixture for tool holders

- ▲ gripping by roller
- ▲ secure clamping
- ▲ quick assembly, no additional clamping necessary



Adapter	DCONWS mm	80 722 ...	PG Y7 £	£
HSK 32, PSC 32	32.0	032	~~317.54~~	120.00
HSK 40, PSC 40	40.0	040	~~317.54~~	120.00
MAS-BT 30	46.0	046	~~278.84~~	100.00
DIN 69871 / DIN 2080 - SK 30, HSK 50, PSC 50	50.0	050	~~278.84~~	100.00
DIN 69871 / DIN 2080 - SK 40, HSK 63, PSC 63, MAS-BT 40, ANSI-CAT 40	63.0	063	~~278.84~~	100.00
DIN 69871 - SK 50	97.5	097	~~554.89~~	200.00
HSK 100, MAS-BT 50, ANSI-CAT 50	100.0	100	~~554.89~~	200.00

MaxiMill – Slot-SX

The new slot milling system

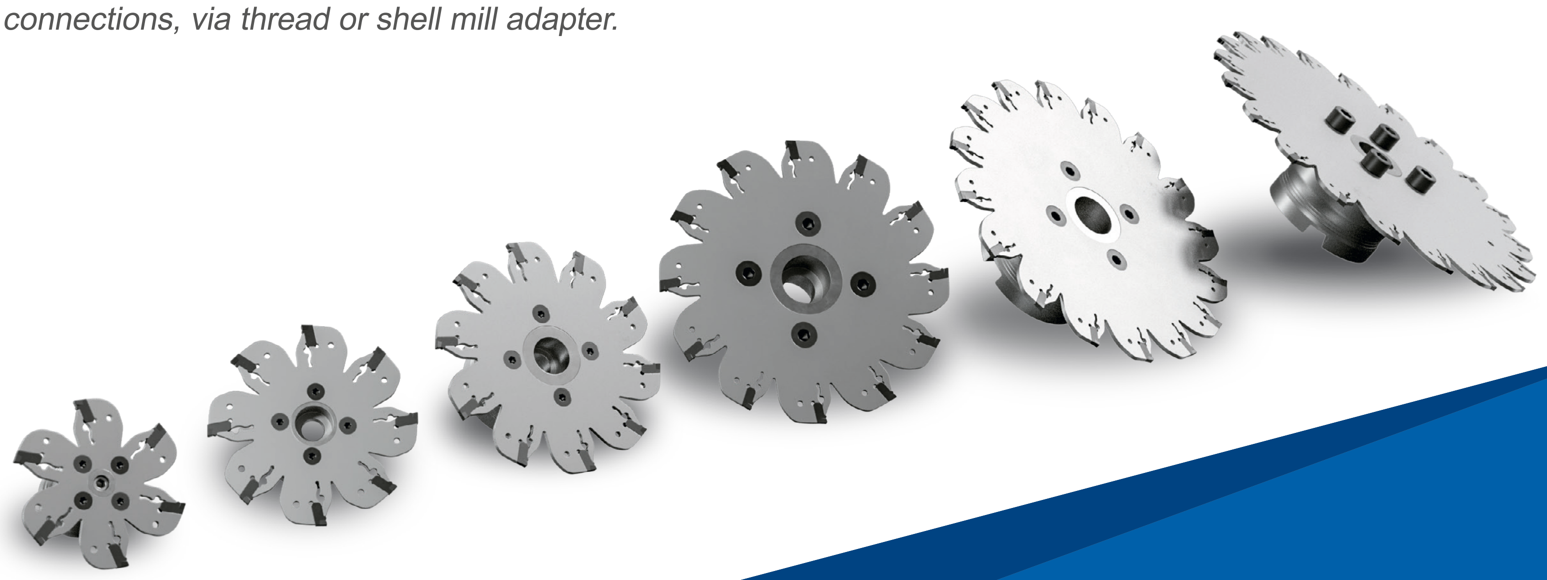
NEW

CUTTING SOLUTIONS BY CERATIZIT

Our new side and face milling cutters from the MaxiMill series deliver maximum process security and optimum performance thanks to thro' coolant – even with diameters as large as 315 mm.

The MaxiMill – Slot-SX is closing a gap in the range of milling tools with indexable inserts with a single program for slot milling which can be used to machine slots and grooves and perform parting off processes reliably. The new series is based on existing grooving inserts from the SX system and therefore covers virtually the entire range of possibilities for ISO P/M/K/N/S.

Diverse range of tool holders from Ø 63 mm up to Ø 315 mm (up to Ø 250 mm with ICH) with various DIN connections, via thread or shell mill adapter.



Diameter of up to 250 mm with internal coolant holes

The internal coolant holes (ICH) on the MaxiMill – Slot-SX ensure optimum chip control during slot milling. Time-consuming removal of chips from grooves or chip jams and material deposits with negative consequences for the workpiece are eliminated thanks to an effective coolant supply – even with ICH diameters up to 250 mm on the new slot milling system. Improved surface qualities and heat regulation are the result, alongside a significant increase in service life for the tools.

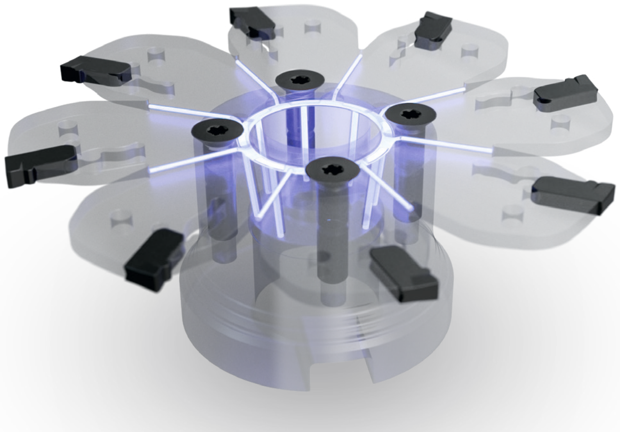
Advantage/benefit

▲ **Thro' coolant up to Ø 250 mm**
Optimum chip control and surface quality

▲ **Chip-free slots**
No manual removal of chips

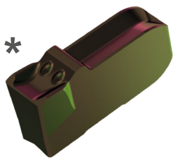
▲ **No chip jams**
Process security and long service life

▲ **No material deposits**
Reduction in built-up edges



Full product range can be found
on Pages **76–77**

Large selection of indexable inserts

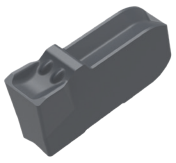
*


-M1
CTCP335

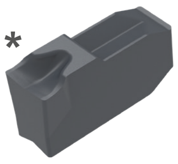
P	●
M	○
K	●
N	
S	
H	
O	

*

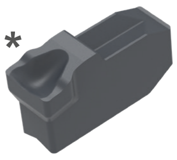

-F2
CTP1340



-M1
CTP1340

NEW
*


-M7
CTP1340

NEW
*


-M8
CTP1340

P	●
M	●
K	○
N	○
S	●
H	
O	

*


-27P
H216T

P	
M	
K	○
N	●
S	
H	
O	○

* These inserts can be found in the UP2DATE September 2022 catalogue

Inserts changed safely

To keep things simple during handling, MaxiMill – Slot-SX makes use of the patented SX clamping key for changing inserts. Thanks to its lever, this key speeds up changing operations and always maintains the correct clamping force.

Features

- ▲ Reliable indexable insert programme with wide range of applications
- ▲ Indexable inserts from the SX grooving system + upgrade to -M7 and -M8 chip breakers
- ▲ Easy handling thanks to patented SX assembly key with eccentric lever system
  - No wear on the insert seat
  - Keeps the indexable insert in a precise and stable position
  - No overstretching of the gripping finger
  - Quick and user-friendly changing of indexable inserts

cuttingtools.ceratizit.com/gb/en/maximill-slot-sx

New CCR Range Extension for Stainless Steel and Heat Resistant Alloys

CircularLine – End milling cutter with corner radius

- ▲ Chip breaker 0.9 x DC
- ▲ Cutting depth: 3 x DC

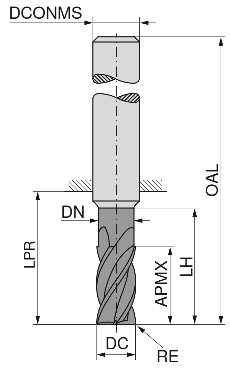
CCR VA

λ_s = 30° 31°
γ_s = 8°

ZEFP

HPC

WNT \ Performance



NEW

DPX22S

DRAGONSKIN

Factory standard

HB

DC e8 mm	RE ±0,05 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	53 643 ...	PG V1 £	£
6.0	1.0	19	5.8	25	27	63	6	6	**06210**	~~64.31~~	41.90
6.0	0.2	19	5.8	25	27	63	6	6	**06202**	~~62.39~~	40.55
6.0	1.5	19	5.8	25	27	63	6	6	**06215**	~~64.31~~	41.90
8.0	1.0	25	7.7	33	35	71	8	6	**08210**	~~83.44~~	54.37
8.0	0.2	25	7.7	33	35	71	8	6	**08202**	~~81.25~~	52.81
8.0	1.5	25	7.7	33	35	71	8	6	**08215**	~~83.44~~	54.37
8.0	2.0	25	7.7	33	35	71	8	6	**08220**	~~83.44~~	54.37
10.0	1.5	31	9.7	41	43	83	10	6	**10215**	~~116.30~~	75.85
10.0	0.2	31	9.7	41	43	83	10	6	**10202**	~~113.84~~	74.00
10.0	1.0	31	9.7	41	43	83	10	6	**10210**	~~116.30~~	75.85
10.0	2.0	31	9.7	41	43	83	10	6	**10220**	~~116.30~~	75.85
12.0	3.0	37	11.6	47	49	94	12	6	**12230**	~~137.76~~	89.79
12.0	0.2	37	11.6	47	49	94	12	6	**12202**	~~134.35~~	87.33
12.0	1.0	37	11.6	47	49	94	12	6	**12210**	~~137.76~~	89.79
12.0	1.5	37	11.6	47	49	94	12	6	**12215**	~~137.76~~	89.79
12.0	2.0	37	11.6	47	49	94	12	6	**12220**	~~137.76~~	89.79
14.0	1.0	43	13.6	55	59	104	14	6	**14210**	~~211.26~~	137.76
14.0	0.2	43	13.6	55	59	104	14	6	**14202**	~~206.96~~	134.52
14.0	1.5	43	13.6	55	59	104	14	6	**14215**	~~211.26~~	137.76
14.0	2.0	43	13.6	55	59	104	14	6	**14220**	~~211.26~~	137.76
14.0	3.0	43	13.6	55	59	104	14	6	**14230**	~~211.26~~	137.76
16.0	4.0	49	15.5	61	63	111	16	6	**16240**	~~280.58~~	182.94
16.0	0.2	49	15.5	61	63	111	16	6	**16202**	~~277.67~~	180.49
16.0	1.0	49	15.5	61	63	111	16	6	**16210**	~~280.58~~	182.94
16.0	1.5	49	15.5	61	63	111	16	6	**16215**	~~280.58~~	182.94
16.0	2.0	49	15.5	61	63	111	16	6	**16220**	~~280.58~~	182.94
16.0	3.0	49	15.5	61	63	111	16	6	**16230**	~~280.58~~	182.94
18.0	2.0	55	17.5	69	73	121	18	6	**18220**	~~337.27~~	219.92
18.0	0.2	55	17.5	69	73	121	18	6	**18202**	~~333.85~~	217.00
18.0	1.0	55	17.5	69	73	121	18	6	**18210**	~~337.27~~	219.92
18.0	1.5	55	17.5	69	73	121	18	6	**18215**	~~337.27~~	219.92
18.0	3.0	55	17.5	69	73	121	18	6	**18230**	~~337.27~~	219.92
18.0	4.0	55	17.5	69	73	121	18	6	**18240**	~~337.27~~	219.92
20.0	2.0	61	19.5	75	77	127	20	6	**20220**	~~393.08~~	256.25
20.0	0.2	61	19.5	75	77	127	20	6	**20202**	~~388.79~~	252.71
20.0	1.0	61	19.5	75	77	127	20	6	**20210**	~~393.08~~	256.25
20.0	1.5	61	19.5	75	77	127	20	6	**20215**	~~393.08~~	256.25
20.0	3.0	61	19.5	75	77	127	20	6	**20230**	~~393.08~~	256.25
20.0	4.0	61	19.5	75	77	127	20	6	**20040**	~~393.08~~	256.25

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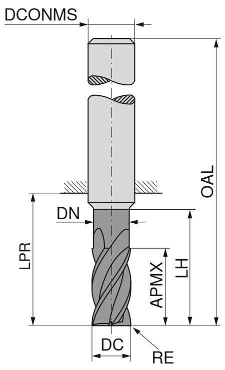
CircularLine – End milling cutter with corner radius

▲ Chip breaker 0.9 x DC
▲ Cutting depth: 4 x DC

CCR VA | λs=35° 36° γs= 9° | ZEFP | HPC

NEW
DPX22S
DRAGONSKIN

WNT \ Performance



Factory standard

HB

DC e8	RE ±0,05	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	53 644 ...	PG V1 £	£
mm	mm	mm	mm	mm	mm	mm	mm				
6.0	1.0	25	5.8	29	31	67	6	5	**06010**	~~66.48~~	43.21
6.0	0.2	25	5.8	29	31	67	6	5	**06002**	~~64.59~~	41.98
6.0	1.5	25	5.8	29	31	67	6	5	**06015**	~~66.48~~	43.21
8.0	1.0	33	7.7	38	40	76	8	5	**08010**	~~85.62~~	55.65
8.0	0.2	33	7.7	38	40	76	8	5	**08002**	~~83.44~~	54.24
8.0	1.5	33	7.7	38	40	76	8	5	**08015**	~~85.62~~	55.65
8.0	2.0	33	7.7	38	40	76	8	5	**08020**	~~85.62~~	55.65
10.0	1.5	41	9.7	47	49	89	10	5	**10015**	~~118.65~~	77.12
10.0	0.2	41	9.7	47	49	89	10	5	**10002**	~~116.05~~	75.43
10.0	1.0	41	9.7	47	49	89	10	5	**10010**	~~118.65~~	77.12
10.0	2.0	41	9.7	47	49	89	10	5	**10020**	~~118.65~~	77.12
12.0	3.0	49	11.6	55	57	102	12	5	**12030**	~~144.83~~	94.38
12.0	0.2	49	11.6	55	57	102	12	5	**12002**	~~141.30~~	91.85
12.0	1.0	49	11.6	55	57	102	12	5	**12010**	~~144.83~~	94.14
12.0	1.5	49	11.6	55	57	102	12	5	**12015**	~~144.83~~	94.38
12.0	2.0	49	11.6	55	57	102	12	5	**12020**	~~144.83~~	94.38
14.0	1.0	57	13.6	64	68	113	14	5	**14010**	~~221.10~~	144.16
14.0	0.2	57	13.6	64	68	113	14	5	**14002**	~~216.68~~	140.84
14.0	1.5	57	13.6	64	68	113	14	5	**14015**	~~221.10~~	144.16
14.0	2.0	57	13.6	64	68	113	14	5	**14020**	~~221.10~~	144.16
14.0	3.0	57	13.6	64	68	113	14	5	**14030**	~~221.10~~	144.16
16.0	4.0	65	15.5	73	75	123	16	5	**16040**	~~287.90~~	187.70
16.0	0.2	65	15.5	73	75	123	16	5	**16002**	~~283.48~~	184.26
16.0	1.0	65	15.5	73	75	123	16	5	**16010**	~~287.90~~	187.70
16.0	1.5	65	15.5	73	75	123	16	5	**16015**	~~287.90~~	187.70
16.0	2.0	65	15.5	73	75	123	16	5	**16020**	~~287.90~~	187.70
16.0	3.0	65	15.5	73	75	123	16	5	**16030**	~~287.90~~	187.70
18.0	2.0	73	17.5	82	86	134	18	5	**18020**	~~340.17~~	221.81
18.0	0.2	73	17.5	82	86	134	18	5	**18002**	~~336.51~~	218.73
18.0	1.0	73	17.5	82	86	134	18	5	**18010**	~~340.17~~	221.81
18.0	1.5	73	17.5	82	86	134	18	5	**18015**	~~340.17~~	221.81
18.0	3.0	73	17.5	82	86	134	18	5	**18030**	~~340.17~~	221.81
18.0	4.0	73	17.5	82	86	134	18	5	**18040**	~~340.17~~	221.81
20.0	2.0	82	19.5	91	93	143	20	5	**20020**	~~404.82~~	263.96
20.0	0.2	82	19.5	91	93	143	20	5	**20002**	~~399.01~~	259.36
20.0	1.0	82	19.5	91	93	143	20	5	**20010**	~~404.82~~	263.96
20.0	1.5	82	19.5	91	93	143	20	5	**20015**	~~404.82~~	263.96
20.0	3.0	82	19.5	91	93	143	20	5	**20030**	~~404.82~~	263.96
20.0	4.0	82	19.5	91	93	143	20	5	**20040**	~~404.82~~	263.96

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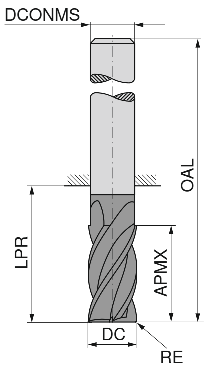
CircularLine – End milling cutter with corner radius

▲ Chip breaker 1.8 x DC
▲ Cutting depth: 5 x DC

CCR AL | λs=45° γs= 8° | ZEFP

NEW
DLC
DRAGONSKIN

WNT \ Performance



Factory standard

HB

DC h8	RE ±0,05	APMX	LPR	OAL	DCONMS h6	ZEFP	53 641 ...	PG V1 £	£
mm	mm	mm	mm	mm	mm				
6.0	1.0	31	40	76	6	4	**06010**	~~82.48~~	53.61
6.0	0.2	31	40	76	6	4	**06002**	~~80.05~~	52.03
6.0	1.5	31	40	76	6	4	**06015**	~~82.48~~	53.61
8.0	1.5	41	50	86	8	4	**08015**	~~97.34~~	63.27
8.0	0.2	41	50	86	8	4	**08002**	~~94.91~~	61.69
8.0	1.0	41	50	86	8	4	**08010**	~~97.34~~	63.27
8.0	2.0	41	50	86	8	4	**08020**	~~97.34~~	63.27
10.0	1.5	51	61	101	10	4	**10015**	~~134.04~~	87.13
10.0	0.2	51	61	101	10	4	**10002**	~~131.27~~	85.33
10.0	1.0	51	61	101	10	4	**10010**	~~134.04~~	87.13
10.0	1.6	51	61	101	10	4	**10016**	~~134.04~~	87.13
10.0	2.0	51	61	101	10	4	**10020**	~~134.04~~	87.13
12.0	1.0	61	71	116	12	4	**12010**	~~166.27~~	108.08
12.0	0.2	61	71	116	12	4	**12002**	~~162.46~~	105.60
12.0	1.5	61	71	116	12	4	**12015**	~~166.27~~	108.08
12.0	1.6	61	71	116	12	4	**12016**	~~166.27~~	108.08
12.0	2.0	61	71	116	12	4	**12020**	~~166.27~~	108.08
12.0	3.0	61	71	116	12	4	**12030**	~~166.27~~	108.08
14.0	1.6	71	82	127	14	4	**14016**	~~246.36~~	160.13
14.0	0.2	71	82	127	14	4	**14002**	~~243.67~~	158.39
14.0	1.0	71	82	127	14	4	**14010**	~~246.36~~	160.13
14.0	1.5	71	82	127	14	4	**14015**	~~246.36~~	160.13
14.0	2.0	71	82	127	14	4	**14020**	~~246.36~~	160.13
14.0	3.0	71	82	127	14	4	**14030**	~~246.36~~	160.13
16.0	2.0	81	93	141	16	4	**16020**	~~328.70~~	213.66
16.0	0.2	81	93	141	16	4	**16002**	~~324.55~~	210.96
16.0	1.0	81	93	141	16	4	**16010**	~~328.70~~	213.66
16.0	1.5	81	93	141	16	4	**16015**	~~328.70~~	213.66
16.0	1.6	81	93	141	16	4	**16016**	~~328.70~~	213.66
16.0	3.0	81	93	141	16	4	**16030**	~~328.70~~	213.66
16.0	4.0	81	93	141	16	4	**16040**	~~328.70~~	213.66
18.0	0.2	91	103	151	18	4	**18002**	~~394.51~~	256.43
18.0	1.0	91	103	151	18	4	**18010**	~~395.88~~	257.32
18.0	1.5	91	103	151	18	4	**18015**	~~395.88~~	257.32
18.0	1.6	91	103	151	18	4	**18016**	~~395.88~~	257.32
18.0	2.0	91	103	151	18	4	**18020**	~~395.88~~	257.32
18.0	3.0	91	103	151	18	4	**18030**	~~395.88~~	257.32
18.0	4.0	91	103	151	18	4	**18040**	~~395.88~~	257.32
20.0	1.6	102	114	164	20	4	**20016**	~~463.06~~	300.99
20.0	0.2	102	114	164	20	4	**20002**	~~457.87~~	297.62
20.0	1.0	102	114	164	20	4	**20010**	~~463.06~~	300.99
20.0	1.5	102	114	164	20	4	**20015**	~~463.06~~	300.99
20.0	2.0	102	114	164	20	4	**20020**	~~463.06~~	300.99
20.0	3.0	102	114	164	20	4	**20030**	~~463.06~~	300.99
20.0	4.0	102	114	164	20	4	**20040**	~~463.06~~	300.99

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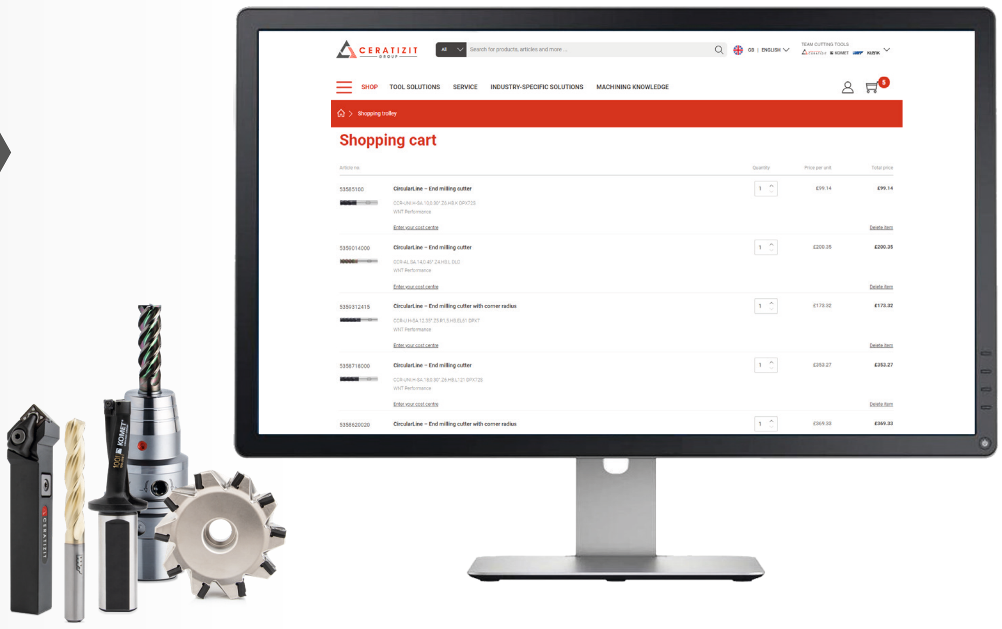


HSS DRILLING

UNI – universal geometry for all applications and materials up to 10xD.

WT – problem solver for difficult to machine materials and applications.

VX – high performance drill for all applications – nominal shank.

NC spot drills, factory standard and high-performance twist drills







	TCS NC-A	UNI	WT	VX	TCS UNI	VX	UNI
		TiN	TiN	TiN	TiN	TiN	TiN
		≤ 3xD	≤ 3xD	≤ 3xD	≤ 5xD	≤ 5xD	≤ 10xD
		DIN 1897	DIN 1897	≈DIN 1897	DIN 338	≈DIN 338	DIN 340
				A		A	
	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance

DC h8/h6	10 520 ...	PG T2		10 107 ...	PG T2		10 110 ...	PG T2		10 122 ...	PG T2		10 171 ...	PG T2		10 124 ...	PG T2		10 270 ...	PG T2	
mm		£	£		£	£		£	£		£	£		£	£		£	£		£	£
0.90													009 1)	~~4.59~~	3.90						
1.00				010 1)	~~5.33~~	4.53	010	~~5.51~~	4.68				010 1)	~~4.59~~	3.90				010	~~8.31~~	7.06
1.10				011 1)	~~5.33~~	4.53	011	~~5.81~~	4.94				011 1)	~~4.59~~	3.90				011	~~9.27~~	7.88
1.20				012 1)	~~5.04~~	4.28	012	~~5.51~~	4.68				012 1)	~~5.20~~	4.42				012	~~10.35~~	8.80
1.25													125 1)	~~4.88~~	4.15						
1.30				013 1)	~~5.33~~	4.53	013	~~5.81~~	4.94				013 1)	~~4.88~~	4.15				013	~~10.20~~	8.67
1.40				014 1)	~~5.20~~	4.42	014	~~5.81~~	4.94				014 1)	~~4.59~~	3.90				014	~~10.08~~	8.57
1.45													145 1)	~~4.59~~	3.90						
1.50				015 1)	~~4.83~~	4.11	015	~~5.51~~	4.68				015 1)	~~4.27~~	3.63				015	~~8.77~~	7.45
1.55													155 1)	~~4.59~~	3.90						
1.60				016 1)	~~4.83~~	4.11	016	~~5.51~~	4.68				016 1)	~~4.59~~	3.90				016	~~10.35~~	8.80
1.65													165 1)	~~4.73~~	4.02						
1.70				017 1)	~~4.57~~	3.88	017	~~5.20~~	4.42				017 1)	~~4.73~~	4.02				017	~~11.31~~	9.61
1.80				018 1)	~~4.83~~	4.11	018	~~5.51~~	4.68				018 1)	~~4.59~~	3.90				018	~~10.79~~	9.17
1.90				019 1)	~~4.83~~	4.11	019	~~5.51~~	4.68				019 1)	~~4.73~~	4.02				019	~~11.54~~	9.81
2.00				020 1)	~~4.24~~	3.60	020	~~4.83~~	4.11	020	~~10.38~~	8.82	020 1)	~~4.24~~	3.60	020	~~13.47~~	11.45	020	~~8.57~~	7.28
2.10				021 1)	~~4.57~~	3.88	021	~~5.20~~	4.42	021	~~11.76~~	10.00	021 1)	~~5.20~~	4.42	021	~~15.41~~	13.10	021	~~9.89~~	8.41
2.20				022 1)	~~5.04~~	4.28	022	~~5.51~~	4.68	022	~~12.68~~	10.78	022 1)	~~5.20~~	4.42	022	~~15.41~~	13.10	022	~~10.08~~	8.57
2.30				023 1)	~~4.88~~	4.15	023	~~5.51~~	4.68	023	~~12.68~~	10.78	023 1)	~~5.20~~	4.42	023	~~15.41~~	13.10	023	~~9.89~~	8.41
2.38				238 1)	~~4.88~~	4.15							238 1)	~~5.20~~	4.42						
2.40				024 1)	~~5.04~~	4.28	024	~~5.81~~	4.94	024	~~13.27~~	11.28	024 1)	~~5.20~~	4.42	024	~~15.41~~	13.10	024	~~9.16~~	7.79
2.50				025 1)	~~4.57~~	3.88	025	~~5.04~~	4.28	025	~~11.60~~	9.86	025 1)	~~4.39~~	3.73	025	~~15.41~~	13.10	025	~~8.77~~	7.45
2.55													255 1)	~~5.20~~	4.42						
2.60				026 1)	~~5.04~~	4.28	026	~~5.81~~	4.94	026	~~13.27~~	11.28	026 1)	~~5.20~~	4.42	026	~~15.41~~	13.10	026	~~10.08~~	8.57
2.70				027 1)	~~5.33~~	4.53	027	~~6.13~~	5.21	027	~~13.73~~	11.67	027 1)	~~5.20~~	4.42	027	~~15.41~~	13.10	027	~~10.66~~	9.06
2.78				278 1)	~~5.33~~	4.53							278 1)	~~6.13~~	5.21						
2.80				028 1)	~~5.33~~	4.53	028	~~6.13~~	5.21	028	~~13.73~~	11.67	028 1)	~~5.20~~	4.42	028	~~15.41~~	13.10	028	~~10.20~~	8.67
2.90				029 1)	~~5.33~~	4.53	029	~~6.13~~	5.21	029	~~13.73~~	11.67	029 1)	~~5.33~~	4.53	029	~~15.41~~	13.10	029	~~10.66~~	9.06
3.00	030	~~8.19~~	6.96	030 1)	~~4.83~~	4.11	030	~~5.20~~	4.42	030	~~12.68~~	10.78	030 1)	~~4.39~~	3.73	030	~~14.65~~	12.45	030	~~9.45~~	8.03
3.10				031 1)	~~5.20~~	4.42	031	~~5.99~~	5.09	031	~~12.68~~	10.78	031 1)	~~5.33~~	4.53	031	~~16.79~~	14.27	031	~~11.31~~	9.61
3.17				317 1)	~~5.04~~	4.28							317 1)	~~5.04~~	4.28						
3.20				032 1)	~~4.88~~	4.15	032	~~5.67~~	4.82	032	~~12.68~~	10.78	032 1)	~~4.83~~	4.11	032	~~16.79~~	14.27	032	~~10.48~~	8.91
3.25													325 1)	~~5.50~~	4.68						
3.30				033 1)	~~5.33~~	4.53	033	~~6.13~~	5.21	033	~~12.68~~	10.78	033 1)	~~4.83~~	4.11	033	~~16.79~~	14.27	033	~~11.11~~	9.44
3.40				034 1)	~~5.51~~	4.68	034	~~6.13~~	5.21	034	~~12.68~~	10.78	034 1)	~~5.65~~	4.80	034	~~16.79~~	14.27	034	~~11.54~~	9.81
3.50				035 1)	~~5.33~~	4.53	035	~~5.51~~	4.68	035	~~12.05~~	10.24	035 1)	~~4.83~~	4.11	035	~~16.79~~	14.27	035	~~11.31~~	9.61
3.57				357 1)	~~5.51~~	4.68							357 1)	~~5.80~~	4.93						
3.60				036 1)	~~5.51~~	4.68	036	~~6.13~~	5.21	036	~~13.47~~	11.45	036 1)	~~5.80~~	4.93	036	~~18.69~~	15.89	036	~~11.71~~	9.95
3.70				037 1)	~~5.80~~	4.93	037	~~6.64~~	5.64	037	~~13.73~~	11.67	037 1)	~~5.80~~	4.93	037	~~18.69~~	15.89	037	~~11.39~~	9.68
3.80				038 1)	~~5.67~~	4.82	038	~~6.13~~	5.21	038	~~13.44~~	11.42	038 1)	~~6.13~~	5.21	038	~~18.69~~	15.89	038	~~10.95~~	9.31
3.90				039 1)	~~6.42~~	5.46	039	~~6.64~~	5.64	039	~~13.73~~	11.67	039 1)	~~6.42~~	5.46	039	~~18.69~~	15.89	039	~~12.27~~	10.43
3.97				397 1)	~~6.10~~	5.19							397 1)	~~6.73~~	5.72						
4.00	040	~~8.34~~	7.09	040 1)	~~5.67~~	4.82	040	~~5.67~~	4.82	040	~~11.15~~	9.48	040 1)	~~5.04~~	4.28	040	~~18.69~~	15.89	040	~~11.98~~	10.18
4.10				041 1)	~~5.99~~	5.09	041	~~6.13~~	5.21	041	~~11.15~~	9.48	041 1)	~~6.10~~	5.19	041	~~21.66~~	18.41	041	~~12.19~~	10.36
4.20				042 1)	~~5.80~~	4.93	042	~~6.13~~	5.21	042	~~11.76~~	10.00	042 1)	~~6.10~~	5.19	042	~~22.90~~	19.47	042	~~11.71~~	9.95
4.25													425 1)	~~6.44~~	5.47						
4.30				043 1)	~~6.13~~	5.21	043	~~6.92~~	5.88	043	~~12.36~~	10.51	043 1)	~~6.42~~	5.46	043	~~21.66~~	18.41	043	~~13.06~~	11.10
4.37				437 1)	~~8.19~~	6.96							437 1)	~~6.87~~	5.84						
4.40				044 1)	~~6.92~~	5.88	044	~~7.08~~	6.02	044	~~14.04~~	11.93	044 1)	~~6.44~~	5.47	044	~~21.66~~	18.41	044	~~11.54~~	9.81
4.50				045 1)	~~6.13~~	5.21	045	~~5.81~~	4.94	045	~~11.60~~	9.86	045 1)	~~6.42~~	5.46	045	~~21.66~~	18.41	045	~~12.27~~	10.43
4.60				046 1)	~~6.73~~	5.72	046	~~7.70~~	6.55	046	~~14.65~~	12.45	046 1)	~~6.87~~	5.84	046	~~24.57~~	20.88	046	~~11.83~~	10.06
4.65							465	~~8.00~~	6.80				465 1)	~~7.02~~	5.97	465	~~24.57~~	20.88			
4.70				047 1)	~~7.08~~	6.02	047	~~8.00~~	6.80	047	~~14.95~~	12.71	047 1)	~~7.08~~	6.02	047	~~24.57~~	20.88	047	~~13.69~~	11.64
4.76				476 1)	~~7.08~~	6.02							476 1)	~~7.02~~	5.97						
4.80				048 1)	~~7.18~~	6.10	048	~~8.00~~	6.80	048	~~14.95~~	12.71	048 1)	~~6.87~~	5.84	048	~~24.57~~	20.88	048	~~13.32~~	11.32
4.90				049 1)	~~7.94~~	6.75	049	~~8.00~~	6.80	049	~~14.95~~	12.71	049 1)	~~7.02~~	5.97	049	~~24.57~~	20.88	049	~~13.50~~	11.48
4.95													495 1)	~~7.02~~	5.97						
5.00	050	~~8.81~~	7.49	050 1)	~~6.27~~	5.33	050	~~6.44~~	5.47	050	~~12.68~~	10.78	050 1)	~~6.13~~	5.21	050	~~26.71~~	22.70	050	~~13.69~~	11.64
5.05													505 1)	~~7.02~~	5.97						
5.10				051 1)	~~8.39~~	7.13				051	~~14.65~~	12.45	051 1)	~~7.02~~	5.97	051	~~26.71~~	22.70	051	~~15.14~~	12.87
5.16				516 1)	~~10.85~~	9.22							516 1)	~~7.70~~	6.55						
5.20				052 1)	~~10.38~~	8.82	052	~~8.00~~	6.80	052	~~15.11~~	12.84	052 1)	~~7.54~~	6.41	052	~~26.71~~	22.70	052	~~14.85~~	12.62
5.30				053 1)	~~10.99~~	9.34	053	~~8.34~~	7.09	053	~~15.27~~	12.98	053 1)	~~7.54~~	6.41	053	~~29.48~~	25.06	053	~~16.34~~	13.89
5.40				054 1)	~~10.85~~	9.22				054	~~16.94~~	14.40	054 1)	~~8.19~~	6.96	054	~~29.48~~	25.06	054	~~17.85~~	15.17
5.50				055 1)	~~8.10~~	6.89	055	~~6.92~~	5.88	055	~~13.44~~	11.42	055 1)	~~8.39~~	7.13	055	~~26.71~~	22.70	055	~~14.23~~	12.10
5.55							555	~~8.81~~	7.49	555	~~16.94~~	14.40	555 1)	~~9.57~~	8.13	555	~~30.66~~	26.06			
5.56				556 1)	~~9.02~~	7.67							556 1)	~~9.57~~	8.13						
5.60				056 1)	~~13.27~~	11.28	056	~~8.81~~	7.49	056	~~16.94~~	14.40	056 1)	~~8.34~~	7.09	056	~~30.66~~	26.06	056	~~18.60~~	15.81
5.70				057 1)	~~13.44~~	11.42	057	~~8.81~~	7.49	057	~~16.94~~	14.40	057 1)	~~8.34~~	7.09	057	~~30.66~~	26.06	057	~~20.54~~	17.46
5.75													575 1)	~~8.34~~	7.09						
5.80				058 1)	~~14.19~~	12.06	058	~~8.81~~	7.49	058	~~16.94~~	14.40	058 1)	~~8.34~~	7.09	058	~~30.66~~	26.06	058	~~18.04~~	15.33
5.90				059 1)	~~14.36~~	12.21	059	~~9.11~~	7.74	059	~~16.94~~	14.40	059 1)	~~8.34~~	7.09	059	~~30.66~~	26.06	059	~~20.11~~	17.09
5.95				595 1)	~~15.74~~	13.38							595 1)	~~10.67~~	9.07						
6.00	060	~~8.81~~	7.49	060 1)	~~8.10~~	6.89	060	~~7.54~~	6.41	060	~~14.19~~	12.06	060 1)	~~8.19~~	6.96	060	~~29.14~~	24.77	060	~~17.09~~	14.53
6.10				061 1)	~~15.27~~	12.98				061	~~21.98~~	18.68	061 1)	~~9.26~~	7.87	061	~~36.00~~	30.60	061	~~20.28~~	17.24
6.20				062 1)	~~15.56~~	13.23				062	~~21.98~~	18.68	062 1)	~~9.26~~	7.87	062	~~36.00~~	30.60	062	~~18.18~~	15.45
6.30				063 1)	~~16.94~~	14.40				063	~~26.24~~	22.30	063 1)	~~9.26~~	7.87	063	~~36.00~~	30.60	063	~~20.28~~	17.24
6.35				635 1)	~~16.79~~	14.27							635 1)	~~9.90~~	8.42						
6.40				064 1)	~~17.24~~	14.65	064	~~12.34~~	10.49	064	~~22.79~~	19.37	064 1)	~~9.90~~	8.42	064	~~36.00~~	30.60	064	~~18.44~~	15.67
6.50				065 1)	~~9.47~~	8.05	065	~~8.81~~	7.49	065	~~16.65~~	14.15	065 1)	~~9.14~~	7.77	065	~~36.00~~	30.60	065	~~17.71~~	15.05
6.60				066 1)	~~17.85~~	15.17				066	~~26.71~~	22.70	066 1)	~~9.90~~	8.42	066	~~38.61~~	32.82	066	~~20.42~~	17.36
6.70				067 1)	~~18.17~~	15.44				067	~~26.71~~	22.70	067 1)	~~9.90~~	8.42	067	~~38.61~~	32.82	067	~~20.95~~	17.81
6.75				675 1)	~~13.91~~	11.82							675 1)	~~13.58~~	11.54						
6.80				068 1)	~~18.62~~	15.83	068	~~12.87~~	10.94	068	~~29.23~~	24.85	068 1)	~~11.22~~	9.54	068	~~38.61~~	32.82	068	~~22.48~~	19.11
6.90				069 1)	~~18.76~~	15.95				069	~~28.84~~	24.51	069 1)	~~11.22~~	9.54	069	~~38.61~~	32.82	069	~~23.30~~	19.81
7.00				070 1)	~~10.85~~	9.22	070	~~10.67~~	9.07	070	~~21.98~~	18.68	070 1)	~~9.57~~	8.13	070	~~38.61~~	32.82	070	~~21.15~~	17.98

	10 520	10 107	10 110	10 122	10 171	10 124	10 270
P	●	●	●	●	●	●	●
M	○	●	●	●	●	●	●
K	●	●	●	●	●	●	●
N	○	○	○	○	○	○	○
S		○	●	○	○	○	○
H			○				
O		○		○	○	○	○

1) self-centering

Ø DC $_{h8}$ for Type UNI, WT and VX / Ø DC$_{h6}$ for Type NC-A

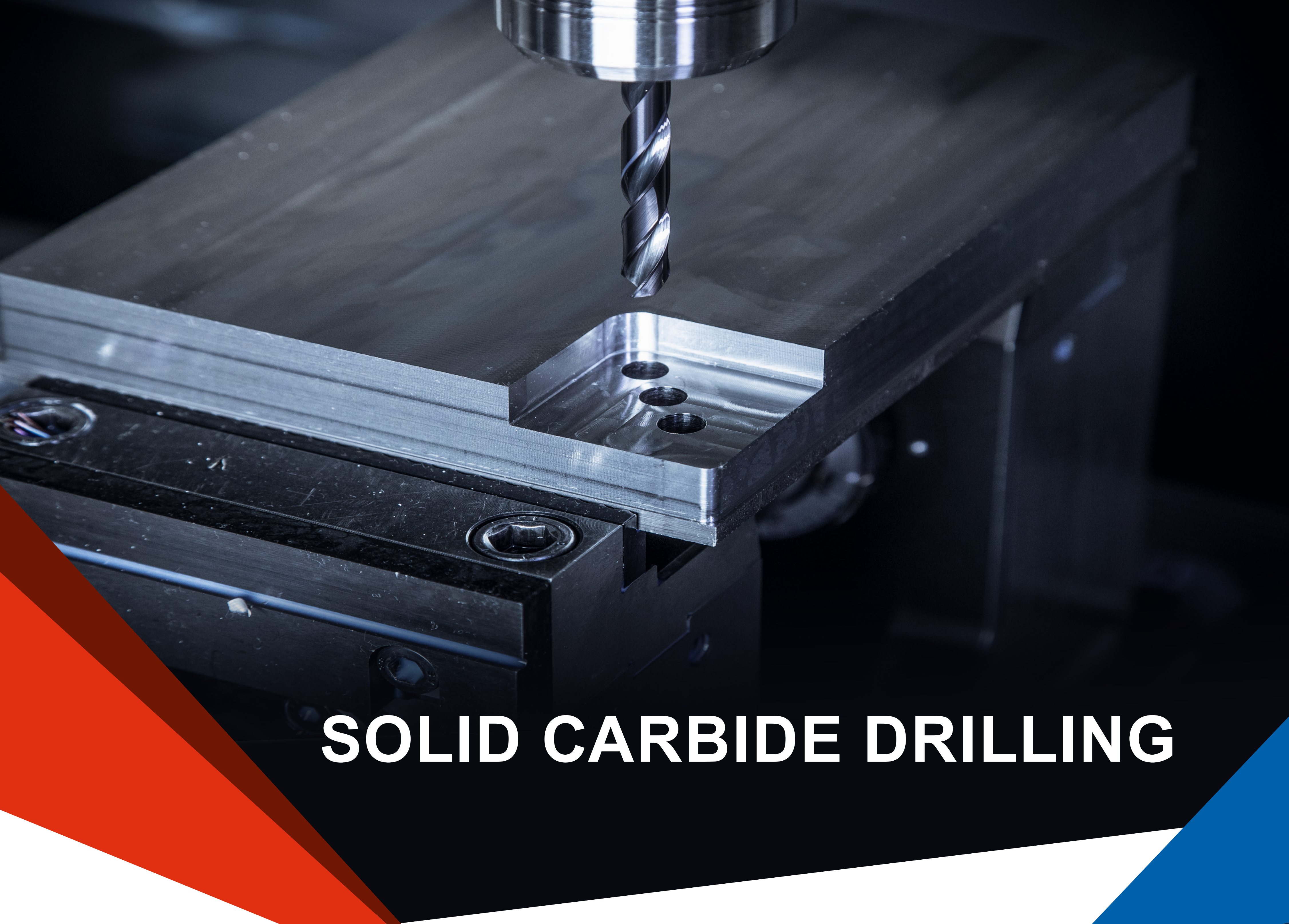
NC spot drills, factory standard and high-performance twist drills

	10 520 ...	10 107 ...	10 110 ...	10 122 ...	10 171 ...	10 124 ...	10 270 ...
	TCS				TCS		
	NC-A	UNI	WT	VX	UNI	VX	UNI
		TiN	TiN	TiN	TiN	TiN	TiN
		≤ 3xD	≤ 3xD	≤ 3xD	≤ 5xD	≤ 5xD	≤ 10xD
		DIN 1897	DIN 1897	≈DIN 1897	DIN 338	≈DIN 338	DIN 340
							
				A		A	
	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance	WNT \ Performance

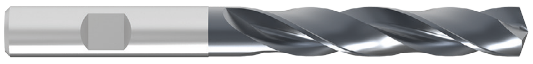
DC $_{h8/h6}$ mm	10 520 ...	PG T2 £	£	10 107 ...	PG T2 £	£	10 110 ...	PG T2 £	£	10 122 ...	PG T2 £	£	10 171 ...	PG T2 £	£	10 124 ...	PG T2 £	£	10 270 ...	PG T2 £	£
7.10				071 1)	~~19.53~~	16.60				071	~~32.34~~	27.49	071 1)	~~12.74~~	10.83	071	~~40.19~~	34.16	071	~~20.42~~	17.36
7.14				714 1)	~~19.99~~	16.99							714 1)	~~19.02~~	16.17						
7.20				072 1)	~~19.70~~	16.75	072	~~14.46~~	12.29	072	~~32.83~~	27.91	072 1)	~~12.74~~	10.83	072	~~40.19~~	34.16	072	~~23.38~~	19.87
7.30				073 1)	~~19.83~~	16.86				073	~~32.83~~	27.91	073 1)	~~12.74~~	10.83	073	~~40.19~~	34.16	073	~~24.44~~	20.77
7.40				074 1)	~~19.70~~	16.75	074	~~14.62~~	12.43	074	~~32.83~~	27.91	074 1)	~~12.74~~	10.83	074	~~40.19~~	34.16	074	~~25.33~~	21.53
7.45										745	~~32.83~~	27.91	745 1)	~~10.23~~	8.70						
7.50				075 1)	~~12.36~~	10.51	075	~~11.16~~	9.49	075	~~23.19~~	19.71	075 1)	~~10.23~~	8.70	075	~~40.19~~	34.16	075	~~25.77~~	21.90
7.55																755	~~40.13~~	34.11			
7.60				076 1)	~~18.46~~	15.69	076	~~15.87~~	13.49	076	~~33.32~~	28.32	076 1)	~~14.95~~	12.71	076	~~40.13~~	34.11	076	~~27.65~~	23.50
7.70				077 1)	~~22.90~~	19.47	077	~~15.87~~	13.49	077	~~35.86~~	30.48	077 1)	~~15.39~~	13.08	077	~~40.13~~	34.11	077	~~26.11~~	22.19
7.80				078 1)	~~22.12~~	18.80	078	~~15.87~~	13.49	078	~~35.86~~	30.48	078 1)	~~14.95~~	12.71	078	~~40.13~~	34.11	078	~~28.78~~	24.46
7.90				079 1)	~~24.26~~	20.62	079	~~15.87~~	13.49	079	~~35.86~~	30.48	079 1)	~~15.39~~	13.08	079	~~40.13~~	34.11	079	~~27.75~~	23.59
7.94				794 1)	~~12.51~~	10.63							794 1)	~~14.95~~	12.71						
8.00	080	~~15.06~~	12.80	080 1)	~~11.94~~	10.15	080	~~11.49~~	9.77	080	~~23.80~~	20.23	080 1)	~~12.41~~	10.55	080	~~40.13~~	34.11	080	~~23.56~~	20.03
8.10				081 1)	~~24.89~~	21.16				081	~~40.70~~	34.60	081 1)	~~14.95~~	12.71	081	~~44.95~~	38.21	081	~~25.97~~	22.07
8.20				082 1)	~~25.96~~	22.07	082	~~15.87~~	13.49	082	~~40.70~~	34.60	082 1)	~~16.01~~	13.61	082	~~44.95~~	38.21	082	~~28.32~~	24.07
8.30				083 1)	~~27.91~~	23.72				083	~~40.70~~	34.60	083 1)	~~16.01~~	13.61	083	~~44.95~~	38.21	083	~~30.02~~	25.52
8.40				084 1)	~~28.68~~	24.38	084	~~16.67~~	14.17	084	~~40.70~~	34.60	084 1)	~~16.79~~	14.27	084	~~44.95~~	38.21	084	~~32.27~~	27.43
8.50				085 1)	~~14.19~~	12.06	085	~~13.81~~	11.74	085	~~27.00~~	22.95	085 1)	~~12.26~~	10.42	085	~~45.33~~	38.53	085	~~27.65~~	23.50
8.60				086 1)	~~17.05~~	14.49				086	~~42.28~~	35.94	086 1)	~~27.41~~	23.30	086	~~41.82~~	35.55	086	~~27.46~~	23.34
8.70				087 1)	~~19.62~~	16.68	087	~~17.15~~	14.58	087	~~42.28~~	35.94	087 1)	~~27.41~~	23.30	087	~~41.82~~	35.55	087	~~27.75~~	23.59
8.73				873 1)	~~22.48~~	19.11							873 1)	~~18.01~~	15.31						
8.80				088 1)	~~18.46~~	15.69	088	~~17.15~~	14.58	088	~~42.28~~	35.94	088 1)	~~19.08~~	16.22	088	~~41.82~~	35.55	088	~~28.19~~	23.96
8.90				089 1)	~~24.27~~	20.63				089	~~42.28~~	35.94	089 1)	~~23.55~~	20.02	089	~~41.82~~	35.55	089	~~28.65~~	24.35
9.00				090 1)	~~14.95~~	12.71	090	~~14.01~~	11.91	090	~~29.46~~	25.04	090 1)	~~15.41~~	13.10	090	~~41.82~~	35.55	090	~~29.05~~	24.69
9.10				091 1)	~~20.45~~	17.38				091	~~53.01~~	45.06	091 1)	~~25.61~~	21.77	091	~~44.95~~	38.21	091	~~29.05~~	24.69
9.20				092 1)	~~20.59~~	17.50	092	~~22.44~~	19.07	092	~~53.01~~	45.06	092 1)	~~26.28~~	22.34	092	~~44.95~~	38.21	092	~~29.05~~	24.69
9.30				093 1)	~~36.31~~	30.86	093	~~22.44~~	19.07	093	~~53.01~~	45.06	093 1)	~~23.34~~	19.84	093	~~44.95~~	38.21	093	~~29.05~~	24.69
9.35										935	~~53.01~~	45.06	935 1)	~~18.17~~	15.44						
9.40				094 1)	~~23.88~~	20.30	094	~~22.44~~	19.07	094	~~53.01~~	45.06	094 1)	~~28.84~~	24.51	094	~~44.95~~	38.21	094	~~29.05~~	24.69
9.50				095 1)	~~16.01~~	13.61	095	~~18.24~~	15.50	095	~~36.82~~	31.30	095 1)	~~18.17~~	15.44	095	~~44.95~~	38.21	095	~~29.05~~	24.69
9.55																955	~~49.02~~	41.67			
9.60				096 1)	~~24.97~~	21.22	096	~~22.79~~	19.37	096	~~39.72~~	33.76	096 1)	~~26.08~~	22.17	096	~~49.02~~	41.67	096	~~30.77~~	26.15
9.70				097 1)	~~24.27~~	20.63	097	~~22.79~~	19.37	097	~~39.72~~	33.76	097 1)	~~30.64~~	26.04	097	~~49.02~~	41.67	097	~~32.27~~	27.43
9.80				098 1)	~~37.39~~	31.78	098	~~24.38~~	20.72	098	~~39.72~~	33.76	098 1)	~~26.08~~	22.17	098	~~49.02~~	41.67	098	~~34.47~~	29.30
9.90				099 1)	~~25.94~~	22.05	099	~~24.38~~	20.72	099	~~39.72~~	33.76	099 1)	~~24.01~~	20.41	099	~~49.02~~	41.67	099	~~37.46~~	31.84
10.00	100	~~15.74~~	13.38	100 1)	~~18.62~~	15.83	100	~~17.15~~	14.58	100	~~35.41~~	30.10	100 1)	~~18.27~~	15.53	100	~~49.02~~	41.67	100	~~40.51~~	34.43
10.10				101 1)	~~24.97~~	21.22							101 1)	~~23.58~~	20.04	101	~~62.15~~	52.83	101	~~44.25~~	37.61
10.20				102 1)	~~29.59~~	25.15	102	~~24.20~~	20.57	102	~~52.40~~	44.54	102 1)	~~24.71~~	21.00	102	~~62.15~~	52.83	102	~~47.26~~	40.17
10.30				103 1)	~~23.19~~	19.71				103	~~53.32~~	45.32	103 1)	~~20.59~~	17.50	103	~~62.15~~	52.83	103	~~50.99~~	43.34
10.40				104 1)	~~27.15~~	23.08							104 1)	~~25.50~~	21.68	104	~~62.15~~	52.83	104	~~50.99~~	43.34
10.50				105 1)	~~32.05~~	27.24	105	~~23.07~~	19.61	105	~~50.91~~	43.27	105 1)	~~25.63~~	21.79	105	~~62.15~~	52.83	105	~~51.77~~	44.00
10.55													955 1)	~~28.09~~	23.88						
10.70										107	~~55.64~~	47.29				107	~~68.26~~	58.02			
10.80							108	~~51.43~~	43.72	108	~~53.49~~	45.47				108	~~68.26~~	58.02			
11.00				110 1)	~~34.17~~	29.04	110	~~23.07~~	19.61	110	~~50.91~~	43.27	110 1)	~~28.09~~	23.88	110	~~57.53~~	48.90	110	~~61.45~~	52.23
11.10										111	~~49.79~~	42.32									
11.11				111 1)	~~40.28~~	34.24							111 1)	~~54.17~~	46.04						
11.20													112 1)	~~54.17~~	46.04	112	~~61.59~~	52.35			
11.30													113 1)	~~54.45~~	46.28	113	~~61.59~~	52.35			
11.40													114 1)	~~54.45~~	46.28	114	~~61.59~~	52.35			
11.50				115 1)	~~38.77~~	32.95	115	~~24.05~~	20.44	115	~~53.01~~	45.06	115 1)	~~35.86~~	30.48	115	~~61.59~~	52.35	115	~~62.24~~	52.90
11.60													116 1)	~~62.39~~	53.03	116	~~67.91~~	57.72			
11.70										117	~~59.60~~	50.66				117	~~67.91~~	57.72			
11.80							118	~~28.84~~	24.51	118	~~62.23~~	52.90				118	~~67.91~~	57.72			
11.90										119	~~78.70~~	66.90				119	~~67.91~~	57.72			
12.00	120	~~24.20~~	20.57	120 1)	~~45.61~~	38.77	120	~~27.51~~	23.38	120	~~60.88~~	51.75	120 1)	~~39.97~~	33.97	120	~~67.91~~	57.72	120	~~62.97~~	53.52
12.10										121	~~44.34~~	37.69									
12.15													121 1)	~~41.03~~	34.88						
12.20																122	~~78.03~~	66.33			
12.30				123 1)	~~42.42~~	36.06	123	~~42.28~~	35.94	123	~~81.15~~	68.98	123 1)	~~42.42~~	36.06	123	~~78.03~~	66.33			
12.50				125 1)	~~45.93~~	39.04	125	~~28.84~~	24.51	125	~~62.71~~	53.30	925 1)	~~41.03~~	34.88	125	~~78.03~~	66.33	125	~~68.97~~	58.62
12.70				127 1)	~~35.04~~	29.78				127	~~139.13~~	118.26	127 1)	~~32.18~~	27.35	127	~~82.17~~	69.84			
12.80							128	~~53.28~~	45.29	128	~~66.06~~	56.15				128	~~82.17~~	69.84			
13.00				130 1)	~~45.93~~	39.04	130	~~29.07~~	24.71	130	~~67.41~~	57.30	130 1)	~~43.77~~	37.20	130	~~90.64~~	77.04	130	~~75.01~~	63.76
13.10													131 1)	~~55.37~~	47.06						
13.30													133 1)	~~55.37~~	47.06						
13.50				135 1)	~~45.93~~	39.04	135	~~31.76~~	27.00	135	~~100.92~~	85.78	135 1)	~~55.37~~	47.06	135	~~117.55~~	99.92	135	~~76.47~~	65.00
14.00				140 1)	~~48.80~~	41.48	140	~~33.32~~	28.32	140	~~100.92~~	85.78	140 1)	~~53.09~~	45.13	140	~~117.55~~	99.92	140	~~79.51~~	67.58
14.50							145	~~34.13~~	29.01	145	~~129.26~~	109.87				145	~~150.39~~	127.83			
15.00							150	~~35.26~~	29.97	150	~~121.73~~	103.47				150	~~141.28~~	120.09			
15.50							155	~~45.98~~	39.08	155	~~131.65~~	111.90				155	~~153.11~~	130.14			
15.75							157	~~48.55~~	41.27												
16.00	160	~~31.54~~	26.81				160	~~45.35~~	38.55	160	~~127.18~~	108.10				160	~~147.83~~	125.66			
16.50							165	~~66.77~~	56.75	165	~~197.16~~	167.59				165	~~229.18~~	194.80			
17.00							170	~~65.85~~	55.97	170	~~197.16~~	167.59				170	~~229.18~~	194.80			
17.50							175	~~61.59~~	52.35	175	~~197.16~~	167.59				175	~~229.18~~	194.80			
17.75							177	~~74.64~~	63.44												
18.00							180	~~72.06~~	61.25	180	~~197.16~~	167.59				180	~~229.18~~	194.80			
18.50							185	~~80.73~~	68.62	185	~~197.16~~	167.59				185	~~229.18~~	194.80			
19.00							190	~~79.10~~	67.24	190	~~197.16~~	167.59				190	~~229.18~~	194.80			
19.50							195	~~88.74~~	75.43	195	~~197.16~~	167.59				195	~~229.18~~	194.80			
20.00	200	~~50.79~~	43.17				200	~~84.88~~	72.15	200	~~175.37~~	149.06				200	~~203.74~~	173.18			
P	●			●			●			●			●			●			●		
M	○			●			●			●			●			●			●		
K	●			●			●			●			●			●			●		
N	○			○			○			○			○			○			○		
S				○			●			○			○			○			○		
H							○														
O				○						○			○			○			○		

1) self-centering

Ø DC $_{h8}$ for Type UNI, WT and VX / **Ø DC** $_{h6}$ for Type NC-A

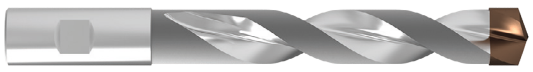


SOLID CARBIDE DRILLING



UNI – for all materials and applications up to 12xD.

TB – for all materials and applications from 16xD up to 50xD.



WTX Change – good solution for lathes with mis-alignment and lower powered machines. Cost effective solution in larger diameters above Ø 20 mm in 0.1 mm increments.

High Performance Drill, DIN 6537

UNI
TiAlN
≤ 3xD
DIN 6537

HA
WNT \ Standard

UNI
TiAlN
≤ 3xD
DIN 6537

HB
WNT \ Standard

UNI
TiAlN
≤ 3xD
DIN 6537

HA
WNT \ Standard

TCS
UNI
TiAlN
≤ 3xD
DIN 6537

HB
WNT \ Standard

DC $_{h7}$ mm	11 706 ... PG T1	£	£	11 707 ... PG T1	£	£	11 700 ... PG T1	£	£	11 701 ... PG T1	£	£
1.00	01000	~~24.15~~	23.40				01000	~~27.30~~	26.50			
1.10	01100	~~24.15~~	23.40				01100	~~27.30~~	26.50			
1.20	01200	~~24.15~~	23.40				01200	~~27.30~~	26.50			
1.30	01300	~~24.15~~	23.40				01300	~~27.30~~	26.50			
1.40	01400	~~24.15~~	23.40				01400	~~27.30~~	26.50			
1.50	01500	~~24.15~~	23.40				01500	~~27.30~~	26.50			
1.60	01600	~~24.15~~	23.40				01600	~~27.30~~	26.50			
1.70	01700	~~24.15~~	23.40				01700	~~27.30~~	26.50			
1.80	01800	~~24.15~~	23.40				01800	~~27.30~~	26.50			
1.90	01900	~~24.15~~	23.40				01900	~~27.30~~	26.50			
2.00	02000	~~22.05~~	21.40				02000	~~27.30~~	26.50			
2.10	02100	~~22.05~~	21.40				02100	~~27.30~~	26.50			
2.20	02200	~~22.05~~	21.40				02200	~~27.30~~	26.50			
2.30	02300	~~22.05~~	21.40				02300	~~27.30~~	26.50			
2.40	02400	~~22.05~~	21.40				02400	~~27.30~~	26.50			
2.50	02500	~~22.05~~	21.40				02500	~~27.30~~	26.50			
2.60	02600	~~22.05~~	21.40				02600	~~27.30~~	26.50			
2.70	02700	~~22.05~~	21.40				02700	~~27.30~~	26.50			
2.80	02800	~~22.05~~	21.40				02800	~~27.30~~	26.50			
2.90	02900	~~22.05~~	21.40				02900	~~27.30~~	26.50			
3.00	03000	~~21.00~~	20.40	03000	~~21.00~~	20.40	03000	~~23.10~~	22.40	03000	~~23.10~~	22.40
3.10	03100	~~21.00~~	20.40	03100	~~21.00~~	20.40	03100	~~23.10~~	22.40	03100	~~23.10~~	22.40
3.20	03200	~~21.00~~	20.40	03200	~~21.00~~	20.40	03200	~~23.10~~	22.40	03200	~~23.10~~	22.40
3.25	03250	~~21.00~~	20.40	03250	~~21.00~~	20.40	03250	~~23.10~~	22.40	03250	~~23.10~~	22.40
3.30	03300	~~21.00~~	20.40	03300	~~21.00~~	20.40	03300	~~23.10~~	22.40	03300	~~23.10~~	22.40
3.40	03400	~~21.00~~	20.40	03400	~~21.00~~	20.40	03400	~~23.10~~	22.40	03400	~~23.10~~	22.40
3.50	03500	~~21.00~~	20.40	03500	~~21.00~~	20.40	03500	~~23.10~~	22.40	03500	~~23.10~~	22.40
3.60	03600	~~21.00~~	20.40	03600	~~21.00~~	20.40	03600	~~23.10~~	22.40	03600	~~23.10~~	22.40
3.70	03700	~~21.00~~	20.40	03700	~~21.00~~	20.40	03700	~~23.10~~	22.40	03700	~~23.10~~	22.40
3.80	03800	~~21.00~~	20.40	03800	~~21.00~~	20.40	03800	~~23.10~~	22.40	03800	~~23.10~~	22.40
3.90	03900	~~21.00~~	20.40	03900	~~21.00~~	20.40	03900	~~23.10~~	22.40	03900	~~23.10~~	22.40
4.00	04000	~~21.00~~	20.40	04000	~~21.00~~	20.40	04000	~~23.10~~	22.40	04000	~~23.10~~	22.40
4.10	04100	~~21.00~~	20.40	04100	~~21.00~~	20.40	04100	~~23.10~~	22.40	04100	~~23.10~~	22.40
4.20	04200	~~21.00~~	20.40	04200	~~21.00~~	20.40	04200	~~23.10~~	22.40	04200	~~23.10~~	22.40
4.30	04300	~~21.00~~	20.40	04300	~~21.00~~	20.40	04300	~~23.10~~	22.40	04300	~~23.10~~	22.40
4.40	04400	~~21.00~~	20.40	04400	~~21.00~~	20.40	04400	~~23.10~~	22.40	04400	~~23.10~~	22.40
4.50	04500	~~21.00~~	20.40	04500	~~21.00~~	20.40	04500	~~23.10~~	22.40	04500	~~23.10~~	22.40
4.60	04600	~~21.00~~	20.40	04600	~~21.00~~	20.40	04600	~~23.10~~	22.40	04600	~~23.10~~	22.40
4.65	04650	~~21.00~~	20.40	04650	~~21.00~~	20.40	04650	~~23.10~~	22.40	04650	~~23.10~~	22.40
4.70	04700	~~21.00~~	20.40	04700	~~21.00~~	20.40	04700	~~23.10~~	22.40	04700	~~23.10~~	22.40
4.80	04800	~~21.00~~	20.40	04800	~~21.00~~	20.40	04800	~~23.10~~	22.40	04800	~~23.10~~	22.40
4.90	04900	~~21.00~~	20.40	04900	~~21.00~~	20.40	04900	~~23.10~~	22.40	04900	~~23.10~~	22.40
5.00	05000	~~21.00~~	20.40	05000	~~21.00~~	20.40	05000	~~23.10~~	22.40	05000	~~23.10~~	22.40
5.10	05100	~~21.00~~	20.40	05100	~~21.00~~	20.40	05100	~~23.10~~	22.40	05100	~~23.10~~	22.40
5.20	05200	~~21.00~~	20.40	05200	~~21.00~~	20.40	05200	~~23.10~~	22.40	05200	~~23.10~~	22.40
5.30	05300	~~21.00~~	20.40	05300	~~21.00~~	20.40	05300	~~23.10~~	22.40	05300	~~23.10~~	22.40
5.40	05400	~~21.00~~	20.40	05400	~~21.00~~	20.40	05400	~~23.10~~	22.40	05400	~~23.10~~	22.40
5.50	05500	~~21.00~~	20.40	05500	~~21.00~~	20.40	05500	~~23.10~~	22.40	05500	~~23.10~~	22.40
5.55	05550	~~21.00~~	20.40	05550	~~21.00~~	20.40	05550	~~23.10~~	22.40	05550	~~23.10~~	22.40
5.60	05600	~~21.00~~	20.40	05600	~~21.00~~	20.40	05600	~~23.10~~	22.40	05600	~~23.10~~	22.40
5.65	05650	~~21.00~~	20.40	05650	~~21.00~~	20.40	05650	~~23.10~~	22.40	05650	~~23.10~~	22.40
5.70	05700	~~21.00~~	20.40	05700	~~21.00~~	20.40	05700	~~23.10~~	22.40	05700	~~23.10~~	22.40
5.80	05800	~~21.00~~	20.40	05800	~~21.00~~	20.40	05800	~~23.10~~	22.40	05800	~~23.10~~	22.40
5.90	05900	~~21.00~~	20.40	05900	~~21.00~~	20.40	05900	~~23.10~~	22.40	05900	~~23.10~~	22.40
6.00	06000	~~21.00~~	20.40	06000	~~21.00~~	20.40	06000	~~23.10~~	22.40	06000	~~23.10~~	22.40
6.10	06100	~~21.00~~	20.40	06100	~~21.00~~	20.40	06100	~~32.55~~	31.60	06100	~~32.55~~	31.60
6.20	06200	~~21.00~~	20.40	06200	~~21.00~~	20.40	06200	~~32.55~~	31.60	06200	~~32.55~~	31.60
6.30	06300	~~21.00~~	20.40	06300	~~21.00~~	20.40	06300	~~32.55~~	31.60	06300	~~32.55~~	31.60
6.40	06400	~~21.00~~	20.40	06400	~~21.00~~	20.40	06400	~~32.55~~	31.60	06400	~~32.55~~	31.60
6.50	06500	~~21.00~~	20.40	06500	~~21.00~~	20.40	06500	~~32.55~~	31.60	06500	~~32.55~~	31.60
6.60	06600	~~21.00~~	20.40	06600	~~21.00~~	20.40	06600	~~32.55~~	31.60	06600	~~32.55~~	31.60
6.70	06700	~~21.00~~	20.40	06700	~~21.00~~	20.40	06700	~~32.55~~	31.60	06700	~~32.55~~	31.60
6.80	06800	~~21.00~~	20.40	06800	~~21.00~~	20.40	06800	~~32.55~~	31.60	06800	~~32.55~~	31.60
6.90	06900	~~21.00~~	20.40	06900	~~21.00~~	20.40	06900	~~32.55~~	31.60	06900	~~32.55~~	31.60
7.00	07000	~~21.00~~	20.40	07000	~~21.00~~	20.40	07000	~~32.55~~	31.60	07000	~~32.55~~	31.60
7.10	07100	~~21.00~~	20.40	07100	~~21.00~~	20.40	07100	~~32.55~~	31.60	07100	~~32.55~~	31.60
7.20	07200	~~21.00~~	20.40	07200	~~21.00~~	20.40	07200	~~32.55~~	31.60	07200	~~32.55~~	31.60
7.30	07300	~~21.00~~	20.40	07300	~~21.00~~	20.40	07300	~~32.55~~	31.60	07300	~~32.55~~	31.60
7.40	07400	~~21.00~~	20.40	07400	~~21.00~~	20.40	07400	~~32.55~~	31.60	07400	~~32.55~~	31.60
7.50	07500	~~21.00~~	20.40	07500	~~21.00~~	20.40	07500	~~32.55~~	31.60	07500	~~32.55~~	31.60
7.55	07550	~~21.00~~	20.40	07550	~~21.00~~	20.40	07550	~~32.55~~	31.60	07550	~~32.55~~	31.60
7.60	07600	~~21.00~~	20.40	07600	~~21.00~~	20.40	07600	~~32.55~~	31.60	07600	~~32.55~~	31.60
7.65	07650	~~21.00~~	20.40	07650	~~21.00~~	20.40	07650	~~32.55~~	31.60	07650	~~32.55~~	31.60
7.70	07700	~~21.00~~	20.40	07700	~~21.00~~	20.40	07700	~~32.55~~	31.60	07700	~~32.55~~	31.60

	11 706	11 707	11 700	11 701
P	●	●	●	●
M			●	●
K	●	●	●	●
N			○	○
S				
H				
O				

High Performance Drill, DIN 6537

	11 706 ...	11 707 ...	11 700 ...	11 701 ...
				TCS
	UNI	UNI	UNI	UNI
	TiAlN	TiAlN	TiAlN	TiAlN
	≤ 3xD	≤ 3xD	≤ 3xD	≤ 3xD
	DIN 6537	DIN 6537	DIN 6537	DIN 6537
	HA	HB	HA	HB
	WNT \ Standard	WNT \ Standard	WNT \ Standard	WNT \ Standard




DC h7 mm	11 706 ...	£	PG T1 £	11 707 ...	£	PG T1 £	11 700 ...	£	PG T1 £	11 701 ...	£	PG T1 £
7.8	07800	~~21.00~~	20.40	07800	~~21.00~~	20.40	07800	~~32.55~~	31.60	07800	~~32.55~~	31.60
7.9	07900	~~21.00~~	20.40	07900	~~21.00~~	20.40	07900	~~32.55~~	31.60	07900	~~32.55~~	31.60
8.0	08000	~~21.00~~	20.40	08000	~~21.00~~	20.40	08000	~~32.55~~	31.60	08000	~~32.55~~	31.60
8.1	08100	~~24.15~~	23.40	08100	~~24.15~~	23.40	08100	~~36.75~~	35.60	08100	~~36.75~~	35.60
8.2	08200	~~24.15~~	23.40	08200	~~24.15~~	23.40	08200	~~36.75~~	35.60	08200	~~36.75~~	35.60
8.3	08300	~~24.15~~	23.40	08300	~~24.15~~	23.40	08300	~~36.75~~	35.60	08300	~~36.75~~	35.60
8.4	08400	~~24.15~~	23.40	08400	~~24.15~~	23.40	08400	~~36.75~~	35.60	08400	~~36.75~~	35.60
8.5	08500	~~24.15~~	23.40	08500	~~24.15~~	23.40	08500	~~36.75~~	35.60	08500	~~36.75~~	35.60
8.6	08600	~~24.15~~	23.40	08600	~~24.15~~	23.40	08600	~~36.75~~	35.60	08600	~~36.75~~	35.60
8.7	08700	~~24.15~~	23.40	08700	~~24.15~~	23.40	08700	~~36.75~~	35.60	08700	~~36.75~~	35.60
8.8	08800	~~24.15~~	23.40	08800	~~24.15~~	23.40	08800	~~36.75~~	35.60	08800	~~36.75~~	35.60
8.9	08900	~~24.15~~	23.40	08900	~~24.15~~	23.40	08900	~~36.75~~	35.60	08900	~~36.75~~	35.60
9.0	09000	~~24.15~~	23.40	09000	~~24.15~~	23.40	09000	~~36.75~~	35.60	09000	~~36.75~~	35.60
9.1	09100	~~24.15~~	23.40	09100	~~24.15~~	23.40	09100	~~36.75~~	35.60	09100	~~36.75~~	35.60
9.2	09200	~~24.15~~	23.40	09200	~~24.15~~	23.40	09200	~~36.75~~	35.60	09200	~~36.75~~	35.60
9.3	09300	~~24.15~~	23.40	09300	~~24.15~~	23.40	09300	~~36.75~~	35.60	09300	~~36.75~~	35.60
9.4	09400	~~24.15~~	23.40	09400	~~24.15~~	23.40	09400	~~36.75~~	35.60	09400	~~36.75~~	35.60
9.5	09500	~~24.15~~	23.40	09500	~~24.15~~	23.40	09500	~~36.75~~	35.60	09500	~~36.75~~	35.60
9.6	09600	~~24.15~~	23.40	09600	~~24.15~~	23.40	09600	~~36.75~~	35.60	09600	~~36.75~~	35.60
9.7	09700	~~24.15~~	23.40	09700	~~24.15~~	23.40	09700	~~36.75~~	35.60	09700	~~36.75~~	35.60
9.8	09800	~~24.15~~	23.40	09800	~~24.15~~	23.40	09800	~~36.75~~	35.60	09800	~~36.75~~	35.60
9.9	09900	~~24.15~~	23.40	09900	~~24.15~~	23.40	09900	~~36.75~~	35.60	09900	~~36.75~~	35.60
10.0	10000	~~24.15~~	23.40	10000	~~24.15~~	23.40	10000	~~36.75~~	35.60	10000	~~36.75~~	35.60
10.1	10100	~~36.75~~	35.60	10100	~~36.75~~	35.60	10100	~~52.50~~	50.90	10100	~~52.50~~	50.90
10.2	10200	~~36.75~~	35.60	10200	~~36.75~~	35.60	10200	~~52.50~~	50.90	10200	~~52.50~~	50.90
10.3	10300	~~36.75~~	35.60	10300	~~36.75~~	35.60	10300	~~52.50~~	50.90	10300	~~52.50~~	50.90
10.4	10400	~~36.75~~	35.60	10400	~~36.75~~	35.60	10400	~~52.50~~	50.90	10400	~~52.50~~	50.90
10.5	10500	~~36.75~~	35.60	10500	~~36.75~~	35.60	10500	~~52.50~~	50.90	10500	~~52.50~~	50.90
10.6	10600	~~36.75~~	35.60	10600	~~36.75~~	35.60	10600	~~52.50~~	50.90	10600	~~52.50~~	50.90
10.7	10700	~~36.75~~	35.60	10700	~~36.75~~	35.60	10700	~~52.50~~	50.90	10700	~~52.50~~	50.90
10.8	10800	~~36.75~~	35.60	10800	~~36.75~~	35.60	10800	~~52.50~~	50.90	10800	~~52.50~~	50.90
10.9	10900	~~36.75~~	35.60	10900	~~36.75~~	35.60	10900	~~52.50~~	50.90	10900	~~52.50~~	50.90
11.0	11000	~~36.75~~	35.60	11000	~~36.75~~	35.60	11000	~~52.50~~	50.90	11000	~~52.50~~	50.90
11.1	11100	~~36.75~~	35.60	11100	~~36.75~~	35.60	11100	~~52.50~~	50.90	11100	~~52.50~~	50.90
11.2	11200	~~36.75~~	35.60	11200	~~36.75~~	35.60	11200	~~52.50~~	50.90	11200	~~52.50~~	50.90
11.3	11300	~~36.75~~	35.60	11300	~~36.75~~	35.60	11300	~~52.50~~	50.90	11300	~~52.50~~	50.90
11.4	11400	~~36.75~~	35.60	11400	~~36.75~~	35.60	11400	~~52.50~~	50.90	11400	~~52.50~~	50.90
11.5	11500	~~36.75~~	35.60	11500	~~36.75~~	35.60	11500	~~52.50~~	50.90	11500	~~52.50~~	50.90
11.6	11600	~~36.75~~	35.60	11600	~~36.75~~	35.60	11600	~~52.50~~	50.90	11600	~~52.50~~	50.90
11.7	11700	~~36.75~~	35.60	11700	~~36.75~~	35.60	11700	~~52.50~~	50.90	11700	~~52.50~~	50.90
11.8	11800	~~36.75~~	35.60	11800	~~36.75~~	35.60	11800	~~52.50~~	50.90	11800	~~52.50~~	50.90
11.9	11900	~~36.75~~	35.60	11900	~~36.75~~	35.60	11900	~~52.50~~	50.90	11900	~~52.50~~	50.90
12.0	12000	~~36.75~~	35.60	12000	~~36.75~~	35.60	12000	~~52.50~~	50.90	12000	~~52.50~~	50.90
12.2	12200	~~49.35~~	47.90	12200	~~49.35~~	47.90	12200	~~70.35~~	68.20	12200	~~70.35~~	68.20
12.3							12300	~~70.35~~	68.20	12300	~~70.35~~	68.20
12.5	12500	~~49.35~~	47.90	12500	~~49.35~~	47.90	12500	~~70.35~~	68.20	12500	~~70.35~~	68.20
12.7							12700	~~70.35~~	68.20	12700	~~70.35~~	68.20
12.8	12800	~~49.35~~	47.90	12800	~~49.35~~	47.90	12800	~~70.35~~	68.20	12800	~~70.35~~	68.20
12.9							12900	~~70.35~~	68.20	12900	~~70.35~~	68.20
13.0	13000	~~49.35~~	47.90	13000	~~49.35~~	47.90	13000	~~70.35~~	68.20	13000	~~70.35~~	68.20
13.1	13100	~~49.35~~	47.90	13100	~~49.35~~	47.90						
13.5	13500	~~49.35~~	47.90	13500	~~49.35~~	47.90	13500	~~70.35~~	68.20	13500	~~70.35~~	68.20
13.8	13800	~~49.35~~	47.90	13800	~~49.35~~	47.90	13800	~~70.35~~	68.20	13800	~~70.35~~	68.20
14.0	14000	~~49.35~~	47.90	14000	~~49.35~~	47.90	14000	~~70.35~~	68.20	14000	~~70.35~~	68.20
14.2	14200	~~63.00~~	61.10	14200	~~63.00~~	61.10	14200	~~91.35~~	88.60	14200	~~91.35~~	88.60
14.4	14400	~~63.00~~	61.10	14400	~~63.00~~	61.10	14400	~~91.35~~	88.60	14400	~~91.35~~	88.60
14.5	14500	~~63.00~~	61.10	14500	~~63.00~~	61.10	14500	~~91.35~~	88.60	14500	~~91.35~~	88.60
14.8	14800	~~63.00~~	61.10	14800	~~63.00~~	61.10	14800	~~91.35~~	88.60	14800	~~91.35~~	88.60
15.0	15000	~~63.00~~	61.10	15000	~~63.00~~	61.10	15000	~~91.35~~	88.60	15000	~~91.35~~	88.60
15.1	15100	~~63.00~~	61.10	15100	~~63.00~~	61.10	15100	~~91.35~~	88.60	15100	~~91.35~~	88.60
15.2	15200	~~63.00~~	61.10	15200	~~63.00~~	61.10	15200	~~91.35~~	88.60	15200	~~91.35~~	88.60
15.5	15500	~~63.00~~	61.10	15500	~~63.00~~	61.10	15500	~~91.35~~	88.60	15500	~~91.35~~	88.60
15.8	15800	~~63.00~~	61.10	15800	~~63.00~~	61.10	15800	~~91.35~~	88.60	15800	~~91.35~~	88.60
16.0	16000	~~63.00~~	61.10	16000	~~63.00~~	61.10	16000	~~91.35~~	88.60	16000	~~91.35~~	88.60
16.5	16500	~~108.15~~	104.90	16500	~~108.15~~	104.90	16500	~~137.55~~	133.40	16500	~~137.55~~	133.40
17.0	17000	~~108.15~~	104.90	17000	~~108.15~~	104.90	17000	~~137.55~~	133.40	17000	~~137.55~~	133.40
17.5	17500	~~108.15~~	104.90	17500	~~108.15~~	104.90	17500	~~137.55~~	133.40	17500	~~137.55~~	133.40
18.0	18000	~~108.15~~	104.90	18000	~~108.15~~	104.90	18000	~~137.55~~	133.40	18000	~~137.55~~	133.40
18.5	18500	~~118.65~~	115.10	18500	~~118.65~~	115.10	18500	~~152.25~~	147.70	18500	~~152.25~~	147.70
18.9	18900	~~118.65~~	115.10	18900	~~118.65~~	115.10	18900	~~152.25~~	147.70	18900	~~152.25~~	147.70
19.0	19000	~~118.65~~	115.10	19000	~~118.65~~	115.10	19000	~~152.25~~	147.70	19000	~~152.25~~	147.70
19.3							19300	~~152.25~~	147.70	19300	~~152.25~~	147.70
19.5	19500	~~118.65~~	115.10	19500	~~118.65~~	115.10	19500	~~152.25~~	147.70	19500	~~152.25~~	147.70
20.0	20000	~~118.65~~	115.10	20000	~~118.65~~	115.10	20000	~~152.25~~	147.70	20000	~~152.25~~	147.70

	11 706 ...	11 707 ...	11 700 ...	11 701 ...
P	●	●	●	●
M			●	●
K	●	●	●	●
N			○	○
S				
H				
O				

High Performance Drill, DIN 6537

	11 710 ...	11 709 ...	11 702 ...	11 703 ...
				TCS
	UNI	UNI	UNI	UNI
	TiAlN	TiAlN	TiAlN	TiAlN
	≤ 5xD	≤ 5xD	≤ 5xD	≤ 5xD
	DIN 6537	DIN 6537	DIN 6537	DIN 6537
	HA	HB	HA	HB
	WNT \ Standard	WNT \ Standard	WNT \ Standard	WNT \ Standard




DC h7	11 710 ...	PG T1		11 709 ...	PG T1		11 702 ...	PG T1		11 703 ...	PG T1	
mm		£	£		£	£		£	£		£	£
1.00							01000	~~31.50~~	30.60			
1.10							01100	~~31.50~~	30.60			
1.20							01200	~~31.50~~	30.60			
1.30							01300	~~31.50~~	30.60			
1.40							01400	~~31.50~~	30.60			
1.50							01500	~~31.50~~	30.60			
1.60							01600	~~31.50~~	30.60			
1.70							01700	~~31.50~~	30.60			
1.80							01800	~~31.50~~	30.60			
1.90							01900	~~31.50~~	30.60			
2.00							02000	~~31.50~~	30.60			
2.10							02100	~~31.50~~	30.60			
2.20							02200	~~31.50~~	30.60			
2.30							02300	~~31.50~~	30.60			
2.40							02400	~~31.50~~	30.60			
2.50							02500	~~31.50~~	30.60			
2.60							02600	~~31.50~~	30.60			
2.70							02700	~~31.50~~	30.60			
2.80							02800	~~31.50~~	30.60			
2.90							02900	~~31.50~~	30.60			
3.00	03000	~~26.25~~	25.50	03000	~~26.25~~	25.50	03000	~~31.50~~	30.60	03000	~~31.50~~	30.60
3.10	03100	~~26.25~~	25.50	03100	~~26.25~~	25.50	03100	~~31.50~~	30.60	03100	~~31.50~~	30.60
3.20	03200	~~26.25~~	25.50	03200	~~26.25~~	25.50	03200	~~31.50~~	30.60	03200	~~31.50~~	30.60
3.25	03250	~~26.25~~	25.50	03250	~~26.25~~	25.50	03250	~~31.50~~	30.60	03250	~~31.50~~	30.60
3.30	03300	~~26.25~~	25.50	03300	~~26.25~~	25.50	03300	~~31.50~~	30.60	03300	~~31.50~~	30.60
3.40	03400	~~26.25~~	25.50	03400	~~26.25~~	25.50	03400	~~31.50~~	30.60	03400	~~31.50~~	30.60
3.50	03500	~~26.25~~	25.50	03500	~~26.25~~	25.50	03500	~~31.50~~	30.60	03500	~~31.50~~	30.60
3.60	03600	~~26.25~~	25.50	03600	~~26.25~~	25.50	03600	~~31.50~~	30.60	03600	~~31.50~~	30.60
3.70	03700	~~26.25~~	25.50	03700	~~26.25~~	25.50	03700	~~31.50~~	30.60	03700	~~31.50~~	30.60
3.80	03800	~~26.25~~	25.50	03800	~~26.25~~	25.50	03800	~~31.50~~	30.60	03800	~~31.50~~	30.60
3.85							03850	~~31.50~~	30.60	03850	~~31.50~~	30.60
3.90	03900	~~26.25~~	25.50	03900	~~26.25~~	25.50	03900	~~31.50~~	30.60	03900	~~31.50~~	30.60
4.00	04000	~~26.25~~	25.50	04000	~~26.25~~	25.50	04000	~~31.50~~	30.60	04000	~~31.50~~	30.60
4.10	04100	~~26.25~~	25.50	04100	~~26.25~~	25.50	04100	~~31.50~~	30.60	04100	~~31.50~~	30.60
4.20	04200	~~26.25~~	25.50	04200	~~26.25~~	25.50	04200	~~31.50~~	30.60	04200	~~31.50~~	30.60
4.30	04300	~~26.25~~	25.50	04300	~~26.25~~	25.50	04300	~~31.50~~	30.60	04300	~~31.50~~	30.60
4.40	04400	~~26.25~~	25.50	04400	~~26.25~~	25.50	04400	~~31.50~~	30.60	04400	~~31.50~~	30.60
4.50	04500	~~26.25~~	25.50	04500	~~26.25~~	25.50	04500	~~31.50~~	30.60	04500	~~31.50~~	30.60
4.60	04600	~~26.25~~	25.50	04600	~~26.25~~	25.50	04600	~~31.50~~	30.60	04600	~~31.50~~	30.60
4.65	04650	~~26.25~~	25.50	04650	~~26.25~~	25.50	04650	~~31.50~~	30.60	04650	~~31.50~~	30.60
4.70	04700	~~26.25~~	25.50	04700	~~26.25~~	25.50	04700	~~31.50~~	30.60	04700	~~31.50~~	30.60
4.80	04800	~~26.25~~	25.50	04800	~~26.25~~	25.50	04800	~~31.50~~	30.60	04800	~~31.50~~	30.60
4.90	04900	~~26.25~~	25.50	04900	~~26.25~~	25.50	04900	~~31.50~~	30.60	04900	~~31.50~~	30.60
5.00	05000	~~26.25~~	25.50	05000	~~26.25~~	25.50	05000	~~31.50~~	30.60	05000	~~31.50~~	30.60
5.10	05100	~~26.25~~	25.50	05100	~~26.25~~	25.50	05100	~~31.50~~	30.60	05100	~~31.50~~	30.60
5.20	05200	~~26.25~~	25.50	05200	~~26.25~~	25.50	05200	~~31.50~~	30.60	05200	~~31.50~~	30.60
5.30	05300	~~26.25~~	25.50	05300	~~26.25~~	25.50	05300	~~31.50~~	30.60	05300	~~31.50~~	30.60
5.40	05400	~~26.25~~	25.50	05400	~~26.25~~	25.50	05400	~~31.50~~	30.60	05400	~~31.50~~	30.60
5.50	05500	~~26.25~~	25.50	05500	~~26.25~~	25.50	05500	~~31.50~~	30.60	05500	~~31.50~~	30.60
5.55	05550	~~26.25~~	25.50	05550	~~26.25~~	25.50	05550	~~31.50~~	30.60	05550	~~31.50~~	30.60
5.60	05600	~~26.25~~	25.50	05600	~~26.25~~	25.50	05600	~~31.50~~	30.60	05600	~~31.50~~	30.60
5.65	05650	~~26.25~~	25.50	05650	~~26.25~~	25.50	05650	~~31.50~~	30.60	05650	~~31.50~~	30.60
5.70	05700	~~26.25~~	25.50	05700	~~26.25~~	25.50	05700	~~31.50~~	30.60	05700	~~31.50~~	30.60
5.80	05800	~~26.25~~	25.50	05800	~~26.25~~	25.50	05800	~~31.50~~	30.60	05800	~~31.50~~	30.60
5.90	05900	~~26.25~~	25.50	05900	~~26.25~~	25.50	05900	~~31.50~~	30.60	05900	~~31.50~~	30.60
6.00	06000	~~26.25~~	25.50	06000	~~26.25~~	25.50	06000	~~31.50~~	30.60	06000	~~31.50~~	30.60
6.10	06100	~~26.25~~	25.50	06100	~~26.25~~	25.50	06100	~~35.70~~	34.60	06100	~~35.70~~	34.60
6.20	06200	~~26.25~~	25.50	06200	~~26.25~~	25.50	06200	~~35.70~~	34.60	06200	~~35.70~~	34.60
6.30	06300	~~26.25~~	25.50	06300	~~26.25~~	25.50	06300	~~35.70~~	34.60	06300	~~35.70~~	34.60
6.40	06400	~~26.25~~	25.50	06400	~~26.25~~	25.50	06400	~~35.70~~	34.60	06400	~~35.70~~	34.60
6.50	06500	~~26.25~~	25.50	06500	~~26.25~~	25.50	06500	~~35.70~~	34.60	06500	~~35.70~~	34.60
6.60	06600	~~26.25~~	25.50	06600	~~26.25~~	25.50	06600	~~35.70~~	34.60	06600	~~35.70~~	34.60
6.70	06700	~~26.25~~	25.50	06700	~~26.25~~	25.50	06700	~~35.70~~	34.60	06700	~~35.70~~	34.60
6.80	06800	~~26.25~~	25.50	06800	~~26.25~~	25.50	06800	~~35.70~~	34.60	06800	~~35.70~~	34.60
6.90	06900	~~26.25~~	25.50	06900	~~26.25~~	25.50	06900	~~35.70~~	34.60	06900	~~35.70~~	34.60
7.00	07000	~~26.25~~	25.50	07000	~~26.25~~	25.50	07000	~~35.70~~	34.60	07000	~~35.70~~	34.60
7.10	07100	~~26.25~~	25.50	07100	~~26.25~~	25.50	07100	~~35.70~~	34.60	07100	~~35.70~~	34.60
7.20	07200	~~26.25~~	25.50	07200	~~26.25~~	25.50	07200	~~35.70~~	34.60	07200	~~35.70~~	34.60
7.30	07300	~~26.25~~	25.50	07300	~~26.25~~	25.50	07300	~~35.70~~	34.60	07300	~~35.70~~	34.60
7.40	07400	~~26.25~~	25.50	07400	~~26.25~~	25.50	07400	~~35.70~~	34.60	07400	~~35.70~~	34.60
7.50	07500	~~26.25~~	25.50	07500	~~26.25~~	25.50	07500	~~35.70~~	34.60	07500	~~35.70~~	34.60
7.55	07550	~~26.25~~	25.50	07550	~~26.25~~	25.50	07550	~~35.70~~	34.60	07550	~~35.70~~	34.60
7.60	07600	~~26.25~~	25.50	07600	~~26.25~~	25.50	07600	~~35.70~~	34.60	07600	~~35.70~~	34.60
7.65	07650	~~26.25~~	25.50	07650	~~26.25~~	25.50	07650	~~35.70~~	34.60	07650	~~35.70~~	34.60
7.70	07700	~~26.25~~	25.50	07700	~~26.25~~	25.50	07700	~~35.70~~	34.60	07700	~~35.70~~	34.60
7.80	07800	~~26.25~~	25.50	07800	~~26.25~~	25.50	07800	~~35.70~~	34.60	07800	~~35.70~~	34.60
7.90	07900	~~26.25~~	25.50	07900	~~26.25~~	25.50	07900	~~35.70~~	34.60	07900	~~35.70~~	34.60
8.00	08000	~~26.25~~	25.50	08000	~~26.25~~	25.50	08000	~~35.70~~	34.60	08000	~~35.70~~	34.60
8.10	08100	~~28.35~~	27.50	08100	~~28.35~~	27.50	08100	~~40.95~~	39.70	08100	~~40.95~~	39.70
8.20	08200	~~28.35~~	27.50	08200	~~28.35~~	27.50	08200	~~40.95~~	39.70	08200	~~40.95~~	39.70
8.30	08300	~~28.35~~	27.50	08300	~~28.35~~	27.50	08300	~~40.95~~	39.70	08300	~~40.95~~	39.70
P	●			●			●			●		
M							●			●		
K	●			●			●			●		
N							○			○		
S												
H												
O												

High Performance Drill, DIN 6537

TCS

DC h7 mm	11 710 ...	PG T1		11 709 ...	PG T1		11 702 ...	PG T1		11 703 ...	PG T1	
	UNI			UNI			UNI			UNI		
	TiAlN			TiAlN			TiAlN			TiAlN		
	≤ 5xD			≤ 5xD			≤ 5xD			≤ 5xD		
	DIN 6537			DIN 6537			DIN 6537			DIN 6537		
	HA			HB			HA			HB		
	WNT \ Standard			WNT \ Standard			WNT \ Standard			WNT \ Standard		
		£	£		£	£		£	£		£	£
8.40	08400	~~28.35~~	27.50	08400	~~28.35~~	27.50	08400	~~40.95~~	39.70	08400	~~40.95~~	39.70
8.50	08500	~~28.35~~	27.50	08500	~~28.35~~	27.50	08500	~~40.95~~	39.70	08500	~~40.95~~	39.70
8.60	08600	~~28.35~~	27.50	08600	~~28.35~~	27.50	08600	~~40.95~~	39.70	08600	~~40.95~~	39.70
8.70	08700	~~28.35~~	27.50	08700	~~28.35~~	27.50	08700	~~40.95~~	39.70	08700	~~40.95~~	39.70
8.80	08800	~~28.35~~	27.50	08800	~~28.35~~	27.50	08800	~~40.95~~	39.70	08800	~~40.95~~	39.70
8.90	08900	~~28.35~~	27.50	08900	~~28.35~~	27.50	08900	~~40.95~~	39.70	08900	~~40.95~~	39.70
9.00	09000	~~28.35~~	27.50	09000	~~28.35~~	27.50	09000	~~40.95~~	39.70	09000	~~40.95~~	39.70
9.10	09100	~~28.35~~	27.50	09100	~~28.35~~	27.50	09100	~~40.95~~	39.70	09100	~~40.95~~	39.70
9.20	09200	~~28.35~~	27.50	09200	~~28.35~~	27.50	09200	~~40.95~~	39.70	09200	~~40.95~~	39.70
9.30	09300	~~28.35~~	27.50	09300	~~28.35~~	27.50	09300	~~40.95~~	39.70	09300	~~40.95~~	39.70
9.40	09400	~~28.35~~	27.50	09400	~~28.35~~	27.50	09400	~~40.95~~	39.70	09400	~~40.95~~	39.70
9.50	09500	~~28.35~~	27.50	09500	~~28.35~~	27.50	09500	~~40.95~~	39.70	09500	~~40.95~~	39.70
9.55							09550	~~40.95~~	39.70	09550	~~40.95~~	39.70
9.60	09600	~~28.35~~	27.50	09600	~~28.35~~	27.50	09600	~~40.95~~	39.70	09600	~~40.95~~	39.70
9.70	09700	~~28.35~~	27.50	09700	~~28.35~~	27.50	09700	~~40.95~~	39.70	09700	~~40.95~~	39.70
9.80	09800	~~28.35~~	27.50	09800	~~28.35~~	27.50	09800	~~40.95~~	39.70	09800	~~40.95~~	39.70
9.90	09900	~~28.35~~	27.50	09900	~~28.35~~	27.50	09900	~~40.95~~	39.70	09900	~~40.95~~	39.70
10.00	10000	~~28.35~~	27.50	10000	~~28.35~~	27.50	10000	~~40.95~~	39.70	10000	~~40.95~~	39.70
10.10	10100	~~43.05~~	41.80	10100	~~43.05~~	41.80	10100	~~60.90~~	59.10	10100	~~60.90~~	59.10
10.20	10200	~~43.05~~	41.80	10200	~~43.05~~	41.80	10200	~~60.90~~	59.10	10200	~~60.90~~	59.10
10.30	10300	~~43.05~~	41.80	10300	~~43.05~~	41.80	10300	~~60.90~~	59.10	10300	~~60.90~~	59.10
10.40	10400	~~43.05~~	41.80	10400	~~43.05~~	41.80	10400	~~60.90~~	59.10	10400	~~60.90~~	59.10
10.50	10500	~~43.05~~	41.80	10500	~~43.05~~	41.80	10500	~~60.90~~	59.10	10500	~~60.90~~	59.10
10.60	10600	~~43.05~~	41.80	10600	~~43.05~~	41.80	10600	~~60.90~~	59.10	10600	~~60.90~~	59.10
10.70	10700	~~43.05~~	41.80	10700	~~43.05~~	41.80	10700	~~60.90~~	59.10	10700	~~60.90~~	59.10
10.80	10800	~~43.05~~	41.80	10800	~~43.05~~	41.80	10800	~~60.90~~	59.10	10800	~~60.90~~	59.10
10.90	10900	~~43.05~~	41.80	10900	~~43.05~~	41.80	10900	~~60.90~~	59.10	10900	~~60.90~~	59.10
11.00	11000	~~43.05~~	41.80	11000	~~43.05~~	41.80	11000	~~60.90~~	59.10	11000	~~60.90~~	59.10
11.10	11100	~~43.05~~	41.80	11100	~~43.05~~	41.80	11100	~~60.90~~	59.10	11100	~~60.90~~	59.10
11.20	11200	~~43.05~~	41.80	11200	~~43.05~~	41.80	11200	~~60.90~~	59.10	11200	~~60.90~~	59.10
11.30	11300	~~43.05~~	41.80	11300	~~43.05~~	41.80	11300	~~60.90~~	59.10	11300	~~60.90~~	59.10
11.40	11400	~~43.05~~	41.80	11400	~~43.05~~	41.80	11400	~~60.90~~	59.10	11400	~~60.90~~	59.10
11.50	11500	~~43.05~~	41.80	11500	~~43.05~~	41.80	11500	~~60.90~~	59.10	11500	~~60.90~~	59.10
11.60	11600	~~43.05~~	41.80	11600	~~43.05~~	41.80	11600	~~60.90~~	59.10	11600	~~60.90~~	59.10
11.70	11700	~~43.05~~	41.80	11700	~~43.05~~	41.80	11700	~~60.90~~	59.10	11700	~~60.90~~	59.10
11.80	11800	~~43.05~~	41.80	11800	~~43.05~~	41.80	11800	~~60.90~~	59.10	11800	~~60.90~~	59.10
11.90	11900	~~43.05~~	41.80	11900	~~43.05~~	41.80	11900	~~60.90~~	59.10	11900	~~60.90~~	59.10
12.00	12000	~~43.05~~	41.80	12000	~~43.05~~	41.80	12000	~~60.90~~	59.10	12000	~~60.90~~	59.10
12.10	12100	~~56.70~~	55.00	12100	~~56.70~~	55.00	12100	~~77.70~~	75.40	12100	~~77.70~~	75.40
12.20	12200	~~56.70~~	55.00	12200	~~56.70~~	55.00	12200	~~77.70~~	75.40	12200	~~77.70~~	75.40
12.40							12400	~~77.70~~	75.40	12400	~~77.70~~	75.40
12.50	12500	~~56.70~~	55.00	12500	~~56.70~~	55.00	12500	~~77.70~~	75.40	12500	~~77.70~~	75.40
12.60							12600	~~77.70~~	75.40	12600	~~77.70~~	75.40
12.80	12800	~~56.70~~	55.00	12800	~~56.70~~	55.00	12800	~~77.70~~	75.40	12800	~~77.70~~	75.40
13.00	13000	~~56.70~~	55.00	13000	~~56.70~~	55.00	13000	~~77.70~~	75.40	13000	~~77.70~~	75.40
13.10							13100	~~77.70~~	75.40	13100	~~77.70~~	75.40
13.20	13200	~~56.70~~	55.00	13200	~~56.70~~	55.00	13200	~~77.70~~	75.40	13200	~~77.70~~	75.40
13.30							13300	~~77.70~~	75.40	13300	~~77.70~~	75.40
13.50	13500	~~56.70~~	55.00	13500	~~56.70~~	55.00	13500	~~77.70~~	75.40	13500	~~77.70~~	75.40
13.80	13800	~~56.70~~	55.00	13800	~~56.70~~	55.00	13800	~~77.70~~	75.40	13800	~~77.70~~	75.40
14.00	14000	~~56.70~~	55.00	14000	~~56.70~~	55.00	14000	~~77.70~~	75.40	14000	~~77.70~~	75.40
14.20	14200	~~73.50~~	71.30	14200	~~73.50~~	71.30	14200	~~99.75~~	96.80	14200	~~99.75~~	96.80
14.30							14300	~~99.75~~	96.80	14300	~~99.75~~	96.80
14.40	14400	~~73.50~~	71.30	14400	~~73.50~~	71.30	14400	~~99.75~~	96.80	14400	~~99.75~~	96.80
14.50	14500	~~73.50~~	71.30	14500	~~73.50~~	71.30	14500	~~99.75~~	96.80	14500	~~99.75~~	96.80
14.80	14800	~~73.50~~	71.30	14800	~~73.50~~	71.30	14800	~~99.75~~	96.80	14800	~~99.75~~	96.80
15.00	15000	~~73.50~~	71.30	15000	~~73.50~~	71.30	15000	~~99.75~~	96.80	15000	~~99.75~~	96.80
15.10							15100	~~99.75~~	96.80	15100	~~99.75~~	96.80
15.20	15200	~~73.50~~	71.30	15200	~~73.50~~	71.30	15200	~~99.75~~	96.80	15200	~~99.75~~	96.80
15.25							15250	~~99.75~~	96.80	15250	~~99.75~~	96.80
15.30							15300	~~99.75~~	96.80	15300	~~99.75~~	96.80
15.50	15500	~~73.50~~	71.30	15500	~~73.50~~	71.30	15500	~~99.75~~	96.80	15500	~~99.75~~	96.80
15.80	15800	~~73.50~~	71.30	15800	~~73.50~~	71.30	15800	~~99.75~~	96.80	15800	~~99.75~~	96.80
16.00	16000	~~73.50~~	71.30	16000	~~73.50~~	71.30	16000	~~99.75~~	96.80	16000	~~99.75~~	96.80
16.20							16200	~~153.30~~	148.70	16200	~~153.30~~	148.70
16.30							16300	~~153.30~~	148.70	16300	~~153.30~~	148.70
16.50	16500	~~119.70~~	116.10	16500	~~119.70~~	116.10	16500	~~153.30~~	148.70	16500	~~153.30~~	148.70
16.80							16800	~~153.30~~	148.70	16800	~~153.30~~	148.70
17.00	17000	~~119.70~~	116.10	17000	~~119.70~~	116.10	17000	~~153.30~~	148.70	17000	~~153.30~~	148.70
17.30							17300	~~153.30~~	148.70	17300	~~153.30~~	148.70
17.50	17500	~~119.70~~	116.10	17500	~~119.70~~	116.10	17500	~~153.30~~	148.70	17500	~~153.30~~	148.70
18.00	18000	~~119.70~~	116.10	18000	~~119.70~~	116.10	18000	~~153.30~~	148.70	18000	~~153.30~~	148.70
18.50	18500	~~128.10~~	124.30	18500	~~128.10~~	124.30	18500	~~166.95~~	161.90	18500	~~166.95~~	161.90
18.90	18900	~~128.10~~	124.30	18900	~~128.10~~	124.30	18900	~~166.95~~	161.90	18900	~~166.95~~	161.90
19.00	19000	~~128.10~~	124.30	19000	~~128.10~~	124.30	19000	~~166.95~~	161.90	19000	~~166.95~~	161.90
19.20							19200	~~166.95~~	161.90	19200	~~166.95~~	161.90
19.30							19300	~~166.95~~	161.90	19300	~~166.95~~	161.90
19.50	19500	~~128.10~~	124.30	19500	~~128.10~~	124.30	19500	~~166.95~~	161.90	19500	~~166.95~~	161.90
19.70							19700	~~166.95~~	161.90	19700	~~166.95~~	161.90
20.00	20000	~~128.10~~	124.30	20000	~~128.10~~	124.30	20000	~~166.95~~	161.90	20000	~~166.95~~	161.90
P	●			●			●			●		
M							●			●		
K	●			●			●			●		
N							○			○		
S												
H												
O												

High Performance Drill, factory standard

UNI
TiAlN
≤ 8xD
DIN 6537

HA

WNT \ Standard

UNI
TiAlN
≤ 12xD
DIN 6537

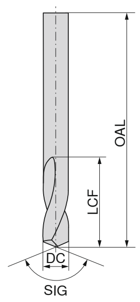
HA

WNT \ Standard

DC h7 mm	11 704 ...	PG T1 £	£	11 705 ...	PG T1 £	£
3.0	03000	~~61.95~~	60.10	03000	~~82.95~~	80.50
3.1	03100	~~61.95~~	60.10	03100	~~82.95~~	80.50
3.2	03200	~~61.95~~	60.10	03200	~~82.95~~	80.50
3.3	03300	~~61.95~~	60.10	03300	~~82.95~~	80.50
3.4	03400	~~61.95~~	60.10	03400	~~82.95~~	80.50
3.5	03500	~~61.95~~	60.10	03500	~~82.95~~	80.50
3.6	03600	~~61.95~~	60.10	03600	~~82.95~~	80.50
3.7	03700	~~61.95~~	60.10	03700	~~82.95~~	80.50
3.8	03800	~~61.95~~	60.10	03800	~~82.95~~	80.50
3.9	03900	~~61.95~~	60.10	03900	~~82.95~~	80.50
4.0	04000	~~61.95~~	60.10	04000	~~82.95~~	80.50
4.1	04100	~~61.95~~	60.10	04100	~~82.95~~	80.50
4.2	04200	~~61.95~~	60.10	04200	~~82.95~~	80.50
4.3	04300	~~61.95~~	60.10	04300	~~82.95~~	80.50
4.4	04400	~~61.95~~	60.10	04400	~~82.95~~	80.50
4.5	04500	~~61.95~~	60.10	04500	~~82.95~~	80.50
4.6	04600	~~61.95~~	60.10	04600	~~82.95~~	80.50
4.7	04700	~~61.95~~	60.10	04700	~~82.95~~	80.50
4.8	04800	~~61.95~~	60.10	04800	~~82.95~~	80.50
4.9	04900	~~61.95~~	60.10	04900	~~82.95~~	80.50
5.0	05000	~~61.95~~	60.10	05000	~~82.95~~	80.50
5.1	05100	~~61.95~~	60.10	05100	~~82.95~~	80.50
5.2	05200	~~61.95~~	60.10	05200	~~82.95~~	80.50
5.3	05300	~~61.95~~	60.10	05300	~~82.95~~	80.50
5.4	05400	~~61.95~~	60.10	05400	~~82.95~~	80.50
5.5	05500	~~61.95~~	60.10	05500	~~82.95~~	80.50
5.6	05600	~~61.95~~	60.10	05600	~~82.95~~	80.50
5.7	05700	~~61.95~~	60.10	05700	~~82.95~~	80.50
5.8	05800	~~61.95~~	60.10	05800	~~82.95~~	80.50
5.9	05900	~~61.95~~	60.10	05900	~~82.95~~	80.50
6.0	06000	~~61.95~~	60.10	06000	~~82.95~~	80.50
6.1	06100	~~76.65~~	74.40	06100	~~92.40~~	89.60
6.2	06200	~~76.65~~	74.40	06200	~~92.40~~	89.60
6.3	06300	~~76.65~~	74.40	06300	~~92.40~~	89.60
6.4	06400	~~76.65~~	74.40	06400	~~92.40~~	89.60
6.5	06500	~~76.65~~	74.40	06500	~~92.40~~	89.60
6.6	06600	~~76.65~~	74.40	06600	~~92.40~~	89.60
6.7	06700	~~76.65~~	74.40	06700	~~92.40~~	89.60
6.8	06800	~~76.65~~	74.40	06800	~~92.40~~	89.60
6.9	06900	~~76.65~~	74.40	06900	~~92.40~~	89.60
7.0	07000	~~76.65~~	74.40	07000	~~92.40~~	89.60
7.1	07100	~~76.65~~	74.40	07100	~~92.40~~	89.60
7.2	07200	~~76.65~~	74.40	07200	~~92.40~~	89.60
7.3	07300	~~76.65~~	74.40	07300	~~92.40~~	89.60
7.4	07400	~~76.65~~	74.40	07400	~~92.40~~	89.60
7.5	07500	~~76.65~~	74.40	07500	~~92.40~~	89.60
7.6	07600	~~76.65~~	74.40	07600	~~92.40~~	89.60
7.7	07700	~~76.65~~	74.40	07700	~~92.40~~	89.60
7.8	07800	~~76.65~~	74.40	07800	~~92.40~~	89.60
7.9	07900	~~76.65~~	74.40	07900	~~92.40~~	89.60
8.0	08000	~~76.65~~	74.40	08000	~~92.40~~	89.60
8.1	08100	~~93.45~~	90.60	08100	~~129.15~~	125.30
8.2	08200	~~93.45~~	90.60	08200	~~129.15~~	125.30
8.3	08300	~~93.45~~	90.60	08300	~~129.15~~	125.30
8.4	08400	~~93.45~~	90.60	08400	~~129.15~~	125.30
8.5	08500	~~93.45~~	90.60	08500	~~129.15~~	125.30
8.6	08600	~~93.45~~	90.60	08600	~~129.15~~	125.30
8.7	08700	~~93.45~~	90.60	08700	~~129.15~~	125.30
8.8	08800	~~93.45~~	90.60	08800	~~129.15~~	125.30
8.9	08900	~~93.45~~	90.60	08900	~~129.15~~	125.30
9.0	09000	~~93.45~~	90.60	09000	~~129.15~~	125.30
9.1	09100	~~93.45~~	90.60	09100	~~129.15~~	125.30
9.2	09200	~~93.45~~	90.60	09200	~~129.15~~	125.30
9.3	09300	~~93.45~~	90.60	09300	~~129.15~~	125.30
9.4	09400	~~93.45~~	90.60	09400	~~129.15~~	125.30
9.5	09500	~~93.45~~	90.60	09500	~~129.15~~	125.30
9.6	09600	~~93.45~~	90.60	09600	~~129.15~~	125.30
9.7	09700	~~93.45~~	90.60	09700	~~129.15~~	125.30
9.8	09800	~~93.45~~	90.60	09800	~~129.15~~	125.30
9.9	09900	~~93.45~~	90.60	09900	~~129.15~~	125.30
10.0	10000	~~93.45~~	90.60	10000	~~129.15~~	125.30
10.2	10200	~~124.95~~	121.20	10200	~~178.50~~	173.10
10.5	10500	~~124.95~~	121.20	10500	~~178.50~~	173.10
10.8	10800	~~124.95~~	121.20	10800	~~178.50~~	173.10
11.0	11000	~~124.95~~	121.20	11000	~~178.50~~	173.10
11.5	11500	~~124.95~~	121.20	11500	~~178.50~~	173.10
11.8	11800	~~124.95~~	121.20	11800	~~178.50~~	173.10
12.0	12000	~~124.95~~	121.20	12000	~~178.50~~	173.10
12.2	12200	~~186.90~~	181.30			
12.5	12500	~~186.90~~	181.30	12500	~~229.95~~	223.10
12.7				12700	~~229.95~~	223.10
12.8				12800	~~229.95~~	223.10
13.0	13000	~~186.90~~	181.30	13000	~~229.95~~	223.10
13.5	13500	~~186.90~~	181.30	13500	~~229.95~~	223.10
13.8				13800	~~229.95~~	223.10
14.0	14000	~~186.90~~	181.30	14000	~~229.95~~	223.10
14.5	14500	~~244.65~~	237.30	14500	~~303.45~~	294.30
14.8				14800	~~303.45~~	294.30
15.0	15000	~~244.65~~	237.30	15000	~~303.45~~	294.30
15.5	15500	~~244.65~~	237.30	15500	~~303.45~~	294.30
15.8				15800	~~303.45~~	294.30
16.0	16000	~~244.65~~	237.30	16000	~~303.45~~	294.30
16.5	16500	~~316.05~~	306.60	16500	~~362.25~~	351.40
17.0	17000	~~316.05~~	306.60	17000	~~362.25~~	351.40
17.5	17500	~~316.05~~	306.60	17500	~~362.25~~	351.40
18.0	18000	~~316.05~~	306.60	18000	~~362.25~~	351.40
18.5	18500	~~351.75~~	341.20	18500	~~362.25~~	351.40
19.0	19000	~~351.75~~	341.20	19000	~~362.25~~	351.40
19.5	19500	~~351.75~~	341.20	19500	~~362.25~~	351.40
20.0	20000	~~351.75~~	341.20	20000	~~362.25~~	351.40

	11 704 ...	11 705 ...
P	●	●
M	●	●
K	●	●
N		
S		
H		
O		

NC Spot Drill, factory standard



NC-A

HA

SIG 142°

WNT \ Standard

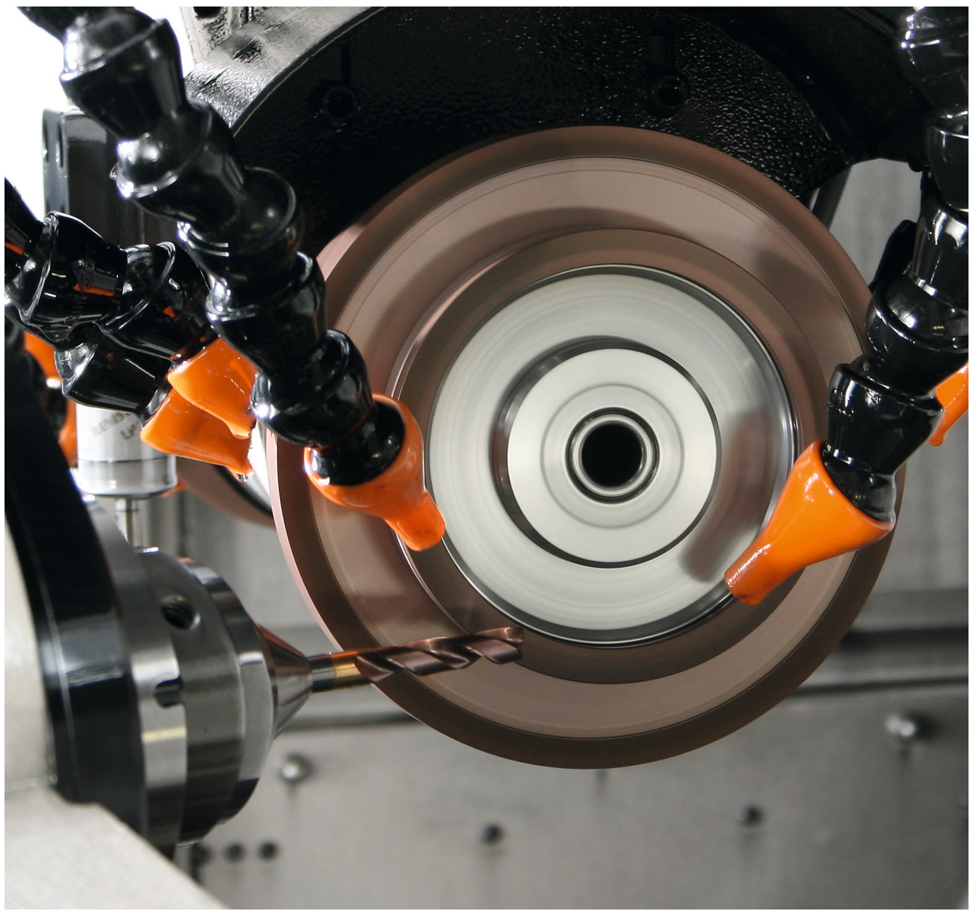
DC h5 mm	OAL mm	LCF mm	10 704 ...	PG T3 £	£
2	32	6	002	~~24.26~~	16.98
3	32	8	003	~~24.26~~	16.98
4	40	10	004	~~19.02~~	13.31
5	50	13	005	~~21.85~~	15.30
6	50	13	006	~~24.38~~	17.07
8	60	23	008	~~37.46~~	26.22
10	70	24	010	~~52.54~~	36.78
12	70	24	012	~~75.78~~	53.05
14	75	26	014	~~87.13~~	60.99
16	75	29	016	~~127.18~~	89.03
18	100	35	018	~~246.66~~	172.66
20	100	35	020	~~207.07~~	144.95

	10 704 ...
P	●
M	
K	●
N	●
S	
H	
O	

New for old

Regrind instead of buying new

Your used precision tool is in the best possible hands with us. We return your tool to you with the original finish, coating and geometry – as good as new and ready for use back in the machine.

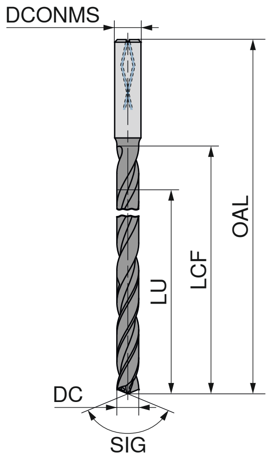


WTX – High performance deep hole drills

▲ Pilot hole necessary
▲ Excellent alignment precision
▲ Secure chip evacuation

WNT \ Performance

11 016 ...	11 017 ...	11 020 ...	11 021 ...
TB 16 UNI	TB 16 ALU	TB 20 UNI	TB 20 ALU
TiAlN	DLC	TiAlN	DLC
≤ 16xD	≤ 16xD	≤ 20xD	≤ 20xD



11 016 ...	11 017 ...	11 020 ...	11 021 ...
HA	HA	HA	HA
SIG 135°	SIG 135°	SIG 135°	SIG 135°
Solid carbide	Solid carbide	Solid carbide	Solid carbide

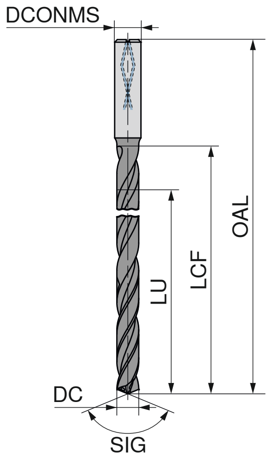
DC$_{h7}$	11 016 ...	PG T7		11 017 ...	PG T7		11 020 ...	PG T7		11 021 ...	PG T7	
mm		£	£		£	£		£	£		£	£
2.0	020	~~110.57~~	107.30	020	~~110.57~~	107.30	020	~~116.99~~	113.50	020	~~116.99~~	113.50
2.2	022	~~110.57~~	107.30	022	~~110.57~~	107.30	022	~~113.03~~	109.60	022	~~116.99~~	113.50
2.3	023	~~110.57~~	107.30	023	~~110.57~~	107.30	023	~~116.99~~	113.50	023	~~116.99~~	113.50
2.4	024	~~123.43~~	119.70	024	~~123.43~~	119.70	024	~~126.70~~	122.90	024	~~131.13~~	127.20
2.5	025	~~123.43~~	119.70	025	~~123.43~~	119.70	025	~~131.13~~	127.20	025	~~131.13~~	127.20
2.7	027	~~123.43~~	119.70	027	~~123.43~~	119.70	027	~~126.70~~	122.90	027	~~131.13~~	127.20
2.8	028	~~123.43~~	119.70	028	~~123.43~~	119.70	028	~~131.13~~	127.20	028	~~131.13~~	127.20
3.0	030	~~156.85~~	152.10	030	~~156.85~~	152.10	030	~~168.93~~	163.90	030	~~174.85~~	169.60
3.2	032	~~156.85~~	152.10	032	~~156.85~~	152.10	032	~~174.85~~	169.60	032	~~174.85~~	169.60
3.3	033	~~156.85~~	152.10	033	~~156.85~~	152.10	033	~~168.93~~	163.90	033	~~174.85~~	169.60
3.5	035	~~156.85~~	152.10	035	~~156.85~~	152.10	035	~~174.85~~	169.60	035	~~174.85~~	169.60
3.8	038	~~163.29~~	158.40	038	~~163.29~~	158.40	038	~~176.39~~	171.10	038	~~182.55~~	177.10
4.0	040	~~163.29~~	158.40	040	~~163.29~~	158.40	040	~~182.55~~	177.10	040	~~182.55~~	177.10
4.2	042	~~176.14~~	170.90	042	~~176.14~~	170.90	042	~~188.80~~	183.10	042	~~195.42~~	189.60
4.5	045	~~176.14~~	170.90	045	~~176.14~~	170.90	045	~~195.42~~	189.60	045	~~195.42~~	189.60
4.8	048	~~186.42~~	180.80	048	~~186.42~~	180.80	048	~~199.98~~	194.00	048	~~207.00~~	200.80
5.0	050	~~186.42~~	180.80	050	~~186.42~~	180.80	050	~~207.00~~	200.80	050	~~207.00~~	200.80
5.5	055	~~194.13~~	188.30	055	~~194.13~~	188.30	055	~~208.69~~	202.40	055	~~216.01~~	209.50
5.8	058	~~194.13~~	188.30	058	~~194.13~~	188.30	058	~~216.01~~	209.50	058	~~216.01~~	209.50
6.0	060	~~194.13~~	188.30	060	~~194.13~~	188.30	060	~~216.01~~	209.50	060	~~216.01~~	209.50
6.5	065	~~207.00~~	200.80	065	~~207.00~~	200.80	065	~~230.14~~	223.20	065	~~230.14~~	223.20
6.8	068	~~222.43~~	215.80	068	~~222.43~~	215.80	068	~~248.14~~	240.70	068	~~248.14~~	240.70
7.0	070	~~222.43~~	215.80	070	~~222.43~~	215.80	070	~~248.14~~	240.70	070	~~248.14~~	240.70
7.5	075	~~249.43~~	241.90	075	~~249.43~~	241.90	075	~~276.42~~	268.10	075	~~276.42~~	268.10
7.8	078	~~249.43~~	241.90	078	~~249.43~~	241.90	078	~~276.42~~	268.10	078	~~276.42~~	268.10
8.0	080	~~249.43~~	241.90	080	~~249.43~~	241.90	080	~~276.42~~	268.10	080	~~276.42~~	268.10
8.5	085	~~275.13~~	266.90	085	~~275.13~~	266.90	085	~~304.70~~	295.60	085	~~304.70~~	295.60
8.8	088	~~306.00~~	296.80	088	~~306.00~~	296.80	088	~~341.99~~	331.70	088	~~341.99~~	331.70
9.0	090	~~306.00~~	296.80	090	~~306.00~~	296.80	090	~~341.99~~	331.70	090	~~341.99~~	331.70
9.8	098	~~306.00~~	296.80	098	~~306.00~~	296.80	098	~~341.99~~	331.70	098	~~341.99~~	331.70
10.0	100	~~306.00~~	296.80	100	~~306.00~~	296.80	100	~~341.99~~	331.70	100	~~341.99~~	331.70
10.2	102	~~341.99~~	331.70	102	~~341.99~~	331.70	102	~~375.42~~	364.20	102	~~375.42~~	364.20
10.8	108	~~341.99~~	331.70	108	~~330.44~~	320.50	108	~~375.42~~	364.20	108	~~375.42~~	364.20
11.8	118	~~341.99~~	331.70	118	~~341.99~~	331.70	118	~~375.42~~	364.20	118	~~375.42~~	364.20
12.0	120	~~341.99~~	331.70	120	~~330.44~~	320.50	120	~~375.42~~	364.20	120	~~375.42~~	364.20

	11 016 ...	11 017 ...	11 020 ...	11 021 ...
P	●		●	
M	●		●	
K	●		●	
N		●		●
S	○		○	
H				
O				

WTX – High performance deep hole drills

- ▲ Pilot hole necessary
- ▲ Excellent alignment precision
- ▲ Secure chip evacuation

WNT \ Performance



TB 25 UNI	TB 25 ALU	TB 30 UNI	TB 30 ALU	TB 40 UNI	TB 50 UNI
TiAlN	DLC	TiAlN	DLC	TiAlN	TiAlN
≤ 25xD	≤ 25xD	≤ 30xD	≤ 30xD	≤ 40xD	≤ 50xD
SIG 135° Solid carbide	SIG 135° Solid carbide	SIG 135° Solid carbide	SIG 135° Solid carbide	SIG 135° Solid carbide	SIG 135° Solid carbide

DC $_{fg6/h7}$	11 025 ...	PG T7		11 026 ...	PG T7		11 030 ...	PG T7		11 031 ...	PG T7		11 040 ...	PG T7		11 050 ...	PG T7	
mm		£	£		£	£		£	£		£	£		£	£		£	£
2.0	020	~~124.72~~	121.00	020	~~124.72~~	121.00	020	~~132.44~~	128.50	020	~~132.44~~	128.50						
2.2	022	~~124.72~~	121.00	022	~~124.72~~	121.00	022	~~132.44~~	128.50	022	~~132.44~~	128.50						
2.3	023	~~124.72~~	121.00	023	~~124.72~~	121.00	023	~~132.44~~	128.50	023	~~132.44~~	128.50						
2.4	024	~~141.42~~	137.20	024	~~141.42~~	137.20	024	~~154.29~~	149.70	024	~~154.29~~	149.70						
2.5	025	~~141.42~~	137.20	025	~~141.42~~	137.20	025	~~154.29~~	149.70	025	~~154.29~~	149.70						
2.7	027	~~141.42~~	137.20	027	~~141.42~~	137.20	027	~~154.29~~	149.70	027	~~154.29~~	149.70						
2.8	028	~~141.42~~	137.20	028	~~141.42~~	137.20	028	~~154.29~~	149.70	028	~~154.29~~	149.70						
3.0	030	~~203.13~~	197.00	030	~~203.13~~	197.00	030	~~259.71~~	251.90	030	~~259.71~~	251.90	030	~~330.40~~	320.50	030	~~448.71~~	435.20
3.2	032	~~203.13~~	197.00	032	~~203.13~~	197.00	032	~~259.71~~	251.90	032	~~259.71~~	251.90						
3.3	033	~~224.98~~	218.20	033	~~223.72~~	217.00	033	~~267.44~~	259.40	033	~~267.44~~	259.40						
3.5	035	~~224.98~~	218.20	035	~~223.72~~	217.00	035	~~267.44~~	259.40	035	~~267.44~~	259.40						
3.8	038	~~231.42~~	224.50	038	~~231.42~~	224.50	038	~~267.44~~	259.40	038	~~267.44~~	259.40						
4.0	040	~~231.42~~	224.50	040	~~231.42~~	224.50	040	~~267.44~~	259.40	040	~~267.44~~	259.40	040	~~330.40~~	320.50	040	~~448.71~~	435.20
4.2	042	~~231.42~~	224.50	042	~~231.42~~	224.50	042	~~267.44~~	259.40	042	~~267.44~~	259.40	042	~~365.14~~	354.20	042	~~498.83~~	483.90
4.5	045	~~241.71~~	234.50	045	~~241.71~~	234.50	045	~~275.13~~	266.90	045	~~275.13~~	266.90	045	~~365.14~~	354.20	045	~~498.83~~	483.90
4.8	048	~~241.71~~	234.50	048	~~241.71~~	234.50	048	~~275.13~~	266.90	048	~~275.13~~	266.90	048	~~389.56~~	377.90	048	~~563.13~~	546.20
5.0	050	~~241.71~~	234.50	050	~~241.71~~	234.50	050	~~275.13~~	266.90	050	~~275.13~~	266.90	050	~~389.56~~	377.90	050	~~563.13~~	546.20
5.5	055	~~259.71~~	251.90	055	~~259.71~~	251.90	055	~~287.99~~	279.40	055	~~287.99~~	279.40	055	~~419.13~~	406.60	055	~~633.84~~	614.80
5.8	058	~~259.71~~	251.90	058	~~259.71~~	251.90	058	~~287.99~~	279.40	058	~~287.99~~	279.40	058	~~419.13~~	406.60	058	~~642.84~~	623.60
6.0	060	~~259.71~~	251.90	060	~~259.71~~	251.90	060	~~287.99~~	279.40	060	~~287.99~~	279.40	060	~~419.13~~	406.60	060	~~642.84~~	623.60
6.5	065	~~289.29~~	280.60	065	~~289.29~~	280.60	065	~~316.27~~	306.80	065	~~316.27~~	306.80	065	~~451.28~~	437.70	065	~~714.84~~	693.40
6.8	068	~~289.29~~	280.60	068	~~289.29~~	280.60	068	~~330.40~~	320.50	068	~~330.40~~	320.50	068	~~451.28~~	437.70	068	~~775.27~~	752.00
7.0	070	~~289.29~~	280.60	070	~~289.29~~	280.60	070	~~330.40~~	320.50	070	~~330.40~~	320.50	070	~~451.28~~	437.70			
7.5	075	~~321.43~~	311.80	075	~~321.43~~	311.80	075	~~330.40~~	320.50	075	~~330.40~~	320.50	075	~~501.41~~	486.40			
7.8	078	~~321.43~~	311.80	078	~~321.43~~	311.80	078	~~367.70~~	356.70	078	~~367.70~~	356.70	078	~~501.41~~	486.40			
8.0	080	~~321.43~~	311.80	080	~~321.43~~	311.80	080	~~367.70~~	356.70	080	~~367.70~~	356.70	080	~~501.41~~	486.40			
8.5	085	~~362.54~~	351.70	085	~~362.54~~	351.70	085	~~424.28~~	411.60	085	~~424.28~~	411.60	085	~~552.84~~	536.30			
8.8	088	~~393.41~~	381.60	088	~~393.41~~	381.60	088	~~446.12~~	432.70	088	~~446.12~~	432.70	088	~~552.84~~	536.30			
9.0	090	~~393.41~~	381.60	090	~~393.41~~	381.60	090	~~446.12~~	432.70	090	~~446.12~~	432.70	090	~~552.84~~	536.30			
9.8	098	~~393.41~~	381.60	098	~~393.41~~	381.60	098	~~446.12~~	432.70	098	~~446.12~~	432.70						
10.0	100	~~393.41~~	381.60	100	~~393.41~~	381.60	100	~~446.12~~	432.70	100	~~446.12~~	432.70						
10.2	102	~~473.14~~	458.90	102	~~473.14~~	458.90	102	~~569.56~~	552.50	102	~~569.56~~	552.50						
10.8	108	~~473.14~~	458.90	108	~~473.14~~	458.90	108	~~569.56~~	552.50	108	~~569.56~~	552.50						
11.8	118	~~473.14~~	458.90	118	~~473.14~~	458.90	118	~~569.56~~	552.50	118	~~569.56~~	552.50						
12.0	120	~~473.14~~	458.90	120	~~473.14~~	458.90	120	~~569.56~~	552.50	120	~~569.56~~	552.50						

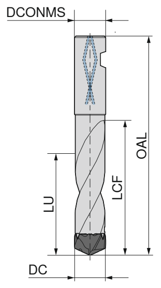
	11 025 ...	11 026 ...	11 030 ...	11 031 ...	11 040 ...	11 050 ...
P	●		●		●	●
M	●		●		●	●
K	●		●		●	●
N		●		●		
S	○		○		○	○
H						
O						

WTX – Holder for Exchangeable drills

▲ with radial teeth

≤ 1xD

Change



HB

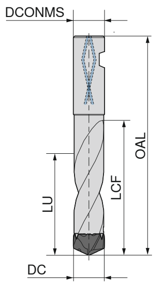
DC	DCONMS h6	OAL	LCF	LU	10 911 ...		PG W1
mm	mm	mm	mm	mm		£	£
12,00 - 12,49	14	81	29	12.5	**120**	~~259.21~~	173.00
12,50 - 12,99	14	81	29	13.0	**125**	~~259.21~~	173.00
13,00 - 13,49	14	81	31	13.5	**130**	~~259.21~~	173.00
13,50 - 13,99	16	86	32	14.0	**135**	~~259.21~~	173.00
14,00 - 14,49	16	86	33	14.5	**140**	~~259.21~~	173.00
14,50 - 14,99	16	91	34	15.0	**145**	~~259.21~~	173.00
15,00 - 15,49	16	91	36	15.5	**150**	~~259.21~~	173.00
15,50 - 16,49	20	97	38	16.5	**161**	~~267.82~~	179.00
15,50 - 16,49	18	92	38	16.5	**160**	~~267.82~~	179.00
16,50 - 17,49	20	99	40	17.5	**166**	~~267.82~~	179.00
16,50 - 17,49	18	94	40	17.5	**165**	~~267.82~~	179.00
17,50 - 18,49	20	104	43	18.5	**176**	~~267.82~~	179.00
17,50 - 18,49	18	99	43	18.5	**175**	~~267.82~~	179.00
18,50 - 19,49	20	99	45	19.5	**185**	~~316.51~~	211.00
19,50 - 20,49	20	104	47	20.5	**195**	~~316.51~~	211.00
20,50 - 21,49	25	111	49	21.5	**205**	~~350.88~~	234.00
21,50 - 22,49	25	116	52	22.5	**215**	~~350.88~~	234.00
22,50 - 23,49	25	116	54	23.5	**225**	~~383.84~~	256.00
23,50 - 24,49	25	121	56	24.5	**235**	~~383.84~~	256.00
24,50 - 25,49	25	123	59	25.5	**245**	~~416.76~~	278.00
25,50 - 26,49	25	123	61	26.5	**255**	~~416.76~~	278.00
26,50 - 27,49	25	128	63	27.5	**265**	~~416.76~~	278.00
27,50 - 28,49	25	128	66	28.5	**275**	~~416.76~~	278.00
28,50 - 29,49	32	134	68	29.5	**285**	~~484.07~~	323.00
29,50 - 30,49	32	139	70	30.5	**295**	~~484.07~~	323.00
30,50 - 31,49	32	139	75	31.5	**305**	~~534.19~~	356.00
31,50 - 32,49	32	139	75	32.5	**315**	~~534.19~~	356.00
32,50 - 33,49	32	150	78	33.5	**325**	~~575.73~~	384.00
33,50 - 34,49	32	150	79	34.5	**335**	~~575.73~~	384.00
34,50 - 35,49	32	150	82	35.5	**345**	~~575.73~~	384.00
35,50 - 37,49	32	152	86	37.5	**355**	~~663.09~~	442.00
37,50 - 39,49	32	157	91	39.5	**375**	~~687.45~~	458.00
39,50 - 41,00	32	167	95	41.5	**395**	~~704.63~~	470.00

WTX – Holder for Exchangeable drills

▲ with radial teeth

≤ 3xD

Change



HB

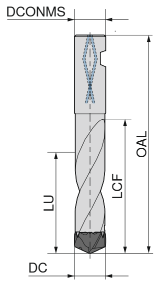
DC	DCONMS h6	OAL	LCF	LU	10 913 ...		PG W1
mm	mm	mm	mm	mm		£	£
12,00 - 12,49	14	100	53	38.0	**120**	~~293.09~~	195.00
12,50 - 12,99	14	105	55	39.0	**125**	~~293.09~~	195.00
13,00 - 13,49	14	105	57	40.0	**130**	~~293.09~~	195.00
13,50 - 13,99	16	110	59	42.0	**135**	~~293.09~~	195.00
14,00 - 14,49	16	115	61	43.0	**140**	~~293.09~~	195.00
14,50 - 14,99	16	115	63	45.0	**145**	~~293.09~~	195.00
15,00 - 15,49	16	115	65	46.0	**150**	~~293.09~~	195.00
15,50 - 16,49	20	125	70	50.0	**161**	~~285.89~~	191.00
15,50 - 16,49	18	120	70	50.0	**160**	~~285.89~~	191.00
16,50 - 17,49	20	130	74	50.0	**166**	~~285.89~~	191.00
16,50 - 17,49	18	125	74	53.0	**165**	~~285.89~~	191.00
17,50 - 18,49	20	135	78	50.0	**176**	~~285.89~~	191.00
17,50 - 18,49	18	130	78	55.0	**175**	~~285.89~~	191.00
18,50 - 19,49	20	135	82	58.0	**185**	~~338.09~~	225.00
19,50 - 20,49	20	140	87	62.0	**195**	~~338.09~~	225.00
20,50 - 21,49	25	150	91	65.0	**205**	~~373.34~~	249.00
21,50 - 22,49	25	155	95	67.0	**215**	~~373.34~~	249.00
22,50 - 23,49	25	160	99	70.0	**225**	~~408.72~~	272.00
23,50 - 24,49	25	165	103	73.0	**235**	~~408.72~~	272.00
24,50 - 25,49	25	165	108	77.0	**245**	~~443.93~~	296.00
25,50 - 26,49	25	175	112	80.0	**255**	~~443.93~~	296.00
26,50 - 27,49	25	175	116	82.0	**265**	~~443.93~~	296.00
27,50 - 28,49	25	180	120	85.0	**275**	~~443.93~~	296.00
28,50 - 29,49	32	190	124	88.0	**285**	~~514.59~~	343.00
29,50 - 30,49	32	195	129	92.0	**295**	~~514.59~~	343.00
30,50 - 31,49	32	195	133	94.0	**305**	~~568.40~~	379.00
31,50 - 32,49	32	200	137	97.0	**315**	~~568.40~~	379.00
32,50 - 33,49	32	210	144	100.5	**325**	~~670.26~~	447.00
33,50 - 34,49	32	215	148	103.5	**335**	~~670.26~~	447.00
34,50 - 35,49	32	220	153	106.5	**345**	~~670.26~~	447.00
35,50 - 37,49	32	227	161	112.5	**355**	~~770.51~~	514.00
37,50 - 39,49	32	237	170	118.5	**375**	~~799.16~~	533.00
39,50 - 41,00	32	247	178	124.5	**395**	~~819.21~~	546.00

WTX – Holder for Exchangeable drills

▲ with radial teeth

≤ 5xD

Change



HB

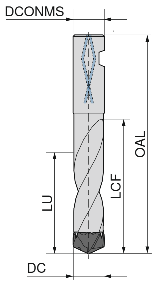
DC	DCONMS h6	OAL	LCF	LU	10 915 ...		PG W1
mm	mm	mm	mm	mm		£	£
12,00 - 12,49	14	125	78	62.0	**120**	~~329.93~~	220.00
12,50 - 12,99	14	130	81	65.0	**125**	~~329.93~~	220.00
13,00 - 13,49	14	130	84	67.0	**130**	~~329.93~~	220.00
13,50 - 13,99	16	140	88	70.0	**135**	~~329.93~~	220.00
14,00 - 14,49	16	140	90	72.0	**140**	~~329.93~~	220.00
14,50 - 14,99	16	145	94	75.0	**145**	~~329.93~~	220.00
15,00 - 15,49	16	145	96	77.0	**150**	~~329.93~~	220.00
15,50 - 16,49	20	160	103	82.0	**161**	~~338.09~~	225.00
15,50 - 16,49	18	155	103	82.0	**160**	~~338.09~~	225.00
16,50 - 17,49	20	165	109	87.0	**166**	~~338.09~~	225.00
16,50 - 17,49	18	160	109	87.0	**165**	~~338.09~~	225.00
17,50 - 18,49	20	170	115	92.0	**176**	~~338.09~~	225.00
17,50 - 18,49	18	165	115	92.0	**175**	~~338.09~~	225.00
18,50 - 19,49	20	175	121	97.0	**185**	~~391.90~~	261.00
19,50 - 20,49	20	180	128	102.0	**195**	~~391.90~~	261.00
20,50 - 21,49	25	195	134	107.0	**205**	~~425.54~~	284.00
21,50 - 22,49	25	200	140	112.0	**215**	~~425.54~~	284.00
22,50 - 23,49	25	205	146	117.0	**225**	~~462.53~~	308.00
23,50 - 24,49	25	210	152	122.0	**235**	~~462.53~~	308.00
24,50 - 25,49	25	220	159	127.0	**245**	~~497.78~~	332.00
25,50 - 26,49	25	225	165	132.0	**255**	~~497.78~~	332.00
26,50 - 27,49	25	230	171	137.0	**265**	~~497.78~~	332.00
27,50 - 28,49	25	240	177	142.0	**275**	~~497.78~~	332.00
28,50 - 29,49	32	250	183	146.0	**285**	~~568.40~~	379.00
29,50 - 30,49	32	255	190	152.0	**295**	~~568.40~~	379.00
30,50 - 31,49	32	260	196	157.0	**305**	~~620.58~~	414.00
31,50 - 32,49	32	265	202	162.0	**315**	~~620.58~~	414.00
32,50 - 33,49	32	275	210	167.5	**325**	~~757.62~~	505.00
33,50 - 34,49	32	285	217	172.5	**335**	~~757.62~~	505.00
34,50 - 35,49	32	290	224	177.5	**345**	~~757.62~~	505.00
35,50 - 37,49	32	302	236	187.5	**355**	~~852.13~~	568.00
37,50 - 39,49	32	317	249	197.5	**375**	~~883.67~~	589.00
39,50 - 41,00	32	327	261	207.5	**395**	~~903.68~~	602.00

WTX – Holder for Exchangeable drills

▲ with radial teeth

≤ 8xD

Change



HB

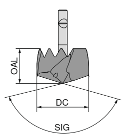
DC	DCONMS h6	OAL	LCF	LU	10 918 ...		PG W1
mm	mm	mm	mm	mm		£	£
12,00 - 12,49	14	165	116	100	**120**	~~419.61~~	280.00
12,50 - 12,99	14	170	121	104	**125**	~~419.61~~	280.00
13,00 - 13,49	14	175	126	108	**130**	~~419.61~~	280.00
13,50 - 13,99	16	180	129	111	**135**	~~419.61~~	280.00
14,00 - 14,49	16	185	134	115	**140**	~~419.61~~	280.00
14,50 - 14,99	16	190	139	120	**145**	~~419.61~~	280.00
15,00 - 15,49	16	195	144	124	**150**	~~419.61~~	280.00
15,50 - 16,49	20	210	152	131	**161**	~~427.62~~	285.00
15,50 - 16,49	18	205	152	131	**160**	~~427.62~~	285.00
16,50 - 17,49	20	220	161	138	**166**	~~427.62~~	285.00
16,50 - 17,49	18	215	161	138	**165**	~~427.62~~	285.00
17,50 - 18,49	20	225	171	147	**176**	~~427.62~~	285.00
17,50 - 18,49	18	220	171	147	**175**	~~427.62~~	285.00
18,50 - 19,49	20	235	180	155	**185**	~~491.68~~	328.00
19,50 - 20,49	20	240	189	163	**195**	~~491.68~~	328.00
20,50 - 21,49	25	260	198	170	**205**	~~534.92~~	357.00
21,50 - 22,49	25	270	207	178	**215**	~~534.92~~	357.00
22,50 - 23,49	25	275	217	187	**225**	~~600.59~~	400.00
23,50 - 24,49	25	285	226	194	**235**	~~600.59~~	400.00
24,50 - 25,49	25	295	235	202	**245**	~~687.05~~	458.00
25,50 - 26,49	25	305	244	210	**255**	~~687.05~~	458.00
26,50 - 27,49	25	315	253	218	**265**	~~687.05~~	458.00
27,50 - 28,49	25	325	263	226	**275**	~~687.05~~	458.00
28,50 - 29,49	32	340	272	234	**285**	~~794.37~~	530.00
29,50 - 30,49	32	345	281	242	**295**	~~794.37~~	530.00
30,50 - 31,49	32	355	290	249	**305**	~~880.87~~	587.00
31,50 - 32,00	32	360	299	257	**315**	~~880.87~~	587.00

Drilling Head for Exchangeable drills can be found on → **Page 24.**

WTX – Drilling Head for Exchangeable drills

▲ extra long head type

	Change UNI	Change VA	Change AL
	DPX74S	Ti700	TiB



SIG 140°
Solid carbide
WNT \ Performance

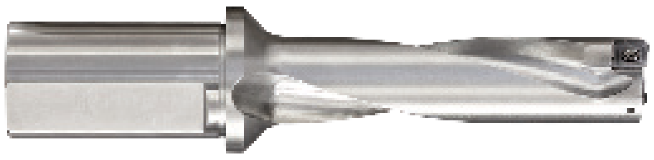
SIG 138°
Solid carbide
WNT \ Performance

SIG 140°
Solid carbide
WNT \ Performance

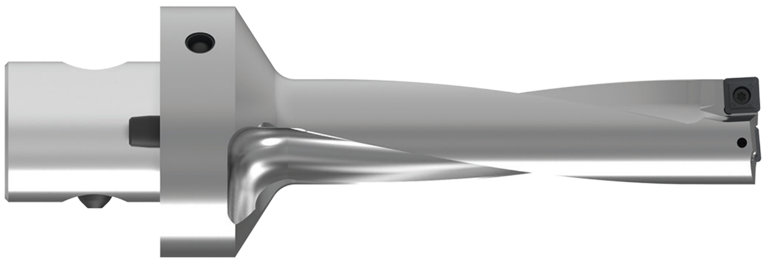
DC h7/m7 mm	OAL mm	10 919 ... PG W2	£	£	10 921 ... PG W2	£	£	10 922 ... PG W2	£	£
12.0	10.7	12000	~~132.93~~	99.70	120	~~132.93~~	99.70	120	~~132.93~~	99.70
12.1	10.7	12100	~~132.93~~	99.70	121	~~132.93~~	99.70	121	~~132.93~~	99.70
12.2	10.7	12200	~~132.93~~	99.70	122	~~132.93~~	99.70	122	~~132.93~~	99.70
12.3	10.7	12300	~~132.93~~	99.70	123	~~132.93~~	99.70	123	~~132.93~~	99.70
12.4	10.7	12400	~~132.93~~	99.70	124	~~132.93~~	99.70	124	~~132.93~~	99.70
12.5	10.7	12500	~~132.93~~	99.70	125	~~132.93~~	99.70	125	~~132.93~~	99.70
12.6	10.7	12600	~~132.93~~	99.70	126	~~132.93~~	99.70	126	~~132.93~~	99.70
12.7	10.7	12700	~~132.93~~	99.70	127	~~132.93~~	99.70	127	~~132.93~~	99.70
12.8	10.7	12800	~~132.93~~	99.70	128	~~132.93~~	99.70	128	~~132.93~~	99.70
12.9	10.7	12900	~~132.93~~	99.70	129	~~132.93~~	99.70	129	~~132.93~~	99.70
13.0	10.7	13000	~~132.93~~	99.70	130	~~132.93~~	99.70	130	~~132.93~~	99.70
13.1	10.7	13100	~~132.93~~	99.70	131	~~132.93~~	99.70	131	~~132.93~~	99.70
13.2	10.7	13200	~~132.93~~	99.70	132	~~132.93~~	99.70	132	~~132.93~~	99.70
13.3	10.7	13300	~~132.93~~	99.70	133	~~132.93~~	99.70	133	~~132.93~~	99.70
13.4	10.7	13400	~~132.93~~	99.70	134	~~132.93~~	99.70	134	~~132.93~~	99.70
13.5	11.3	13500	~~132.93~~	99.70	135	~~132.93~~	99.70	135	~~132.93~~	99.70
13.6	11.3	13600	~~132.93~~	99.70	136	~~132.93~~	99.70	136	~~132.93~~	99.70
13.7	11.3	13700	~~132.93~~	99.70	137	~~132.93~~	99.70	137	~~132.93~~	99.70
13.8	11.3	13800	~~132.93~~	99.70	138	~~132.93~~	99.70	138	~~132.93~~	99.70
13.9	11.3	13900	~~132.93~~	99.70	139	~~132.93~~	99.70	139	~~132.93~~	99.70
14.0	11.3	14000	~~132.93~~	99.70	140	~~132.93~~	99.70	140	~~132.93~~	99.70
14.1	11.3	14100	~~132.93~~	99.70	141	~~132.93~~	99.70	141	~~132.93~~	99.70
14.2	11.3	14200	~~132.93~~	99.70	142	~~132.93~~	99.70	142	~~132.93~~	99.70
14.3	11.3	14300	~~132.93~~	99.70	143	~~132.93~~	99.70	143	~~132.93~~	99.70
14.4	11.3	14400	~~132.93~~	99.70	144	~~132.93~~	99.70	144	~~132.93~~	99.70
14.5	11.3	14500	~~132.93~~	99.70	145	~~132.93~~	99.70	145	~~132.93~~	99.70
14.6	11.3	14600	~~132.93~~	99.70	146	~~132.93~~	99.70	146	~~132.93~~	99.70
14.7	11.3	14700	~~132.93~~	99.70	147	~~132.93~~	99.70	147	~~132.93~~	99.70
14.8	11.3	14800	~~132.93~~	99.70	148	~~132.93~~	99.70	148	~~132.93~~	99.70
14.9	11.3	14900	~~132.93~~	99.70	149	~~132.93~~	99.70	149	~~132.93~~	99.70
15.0	11.3	15000	~~132.93~~	99.70	150	~~132.93~~	99.70	150	~~132.93~~	99.70
15.1	11.3	15100	~~132.93~~	99.70	151	~~132.93~~	99.70	151	~~132.93~~	99.70
15.2	11.3	15200	~~132.93~~	99.70	152	~~132.93~~	99.70	152	~~132.93~~	99.70
15.3	11.3	15300	~~132.93~~	99.70	153	~~132.93~~	99.70	153	~~132.93~~	99.70
15.4	11.3	15400	~~132.93~~	99.70	154	~~132.93~~	99.70	154	~~132.93~~	99.70
15.5	11.9	15500	~~132.93~~	99.70	155	~~132.93~~	99.70	155	~~132.93~~	99.70
15.6	11.9	15600	~~132.93~~	99.70	156	~~132.93~~	99.70	156	~~132.93~~	99.70
15.7	11.9	15700	~~132.93~~	99.70	157	~~132.93~~	99.70	157	~~132.93~~	99.70
15.8	11.9	15800	~~132.93~~	99.70	158	~~132.93~~	99.70	158	~~132.93~~	99.70
15.9	11.9	15900	~~132.93~~	99.70	159	~~132.93~~	99.70	159	~~132.93~~	99.70
16.0	11.9	16000	~~132.93~~	99.70	160	~~132.93~~	99.70	160	~~132.93~~	99.70
16.1	11.9	16100	~~132.93~~	99.70	161	~~132.93~~	99.70	161	~~132.93~~	99.70
16.2	11.9	16200	~~132.93~~	99.70	162	~~132.93~~	99.70	162	~~132.93~~	99.70
16.3	11.9	16300	~~132.93~~	99.70	163	~~132.93~~	99.70	163	~~132.93~~	99.70
16.4	11.9	16400	~~132.93~~	99.70	164	~~132.93~~	99.70	164	~~132.93~~	99.70
16.5	13.4	16500	~~132.93~~	99.70	165	~~132.93~~	99.70	165	~~132.93~~	99.70
16.6	13.4	16600	~~132.93~~	99.70	166	~~132.93~~	99.70	166	~~132.93~~	99.70
16.7	13.4	16700	~~132.93~~	99.70	167	~~132.93~~	99.70	167	~~132.93~~	99.70
16.8	13.4	16800	~~132.93~~	99.70	168	~~132.93~~	99.70	168	~~132.93~~	99.70
16.9	13.4	16900	~~132.93~~	99.70	169	~~132.93~~	99.70	169	~~132.93~~	99.70
17.0	13.4	17000	~~132.93~~	99.70	170	~~132.93~~	99.70	170	~~132.93~~	99.70
17.1	13.4	17100	~~132.93~~	99.70	171	~~132.93~~	99.70	171	~~132.93~~	99.70
17.2	13.4	17200	~~132.93~~	99.70	172	~~132.93~~	99.70	172	~~132.93~~	99.70
17.3	13.4	17300	~~132.93~~	99.70	173	~~132.93~~	99.70	173	~~132.93~~	99.70
17.4	13.4	17400	~~132.93~~	99.70	174	~~132.93~~	99.70	174	~~132.93~~	99.70
17.5	13.4	17500	~~132.93~~	99.70	175	~~132.93~~	99.70	175	~~132.93~~	99.70
17.6	13.4	17600	~~132.93~~	99.70	176	~~132.93~~	99.70	176	~~132.93~~	99.70
17.7	13.4	17700	~~132.93~~	99.70	177	~~132.93~~	99.70	177	~~132.93~~	99.70
17.8	13.4	17800	~~132.93~~	99.70	178	~~132.93~~	99.70	178	~~132.93~~	99.70
17.9	13.4	17900	~~132.93~~	99.70	179	~~132.93~~	99.70	179	~~132.93~~	99.70
18.0	13.4	18000	~~132.93~~	99.70	180	~~132.93~~	99.70	180	~~132.93~~	99.70
18.1	13.4	18100	~~144.64~~	108.48	181	~~144.64~~	108.48	181	~~144.64~~	108.48
18.2	13.4	18200	~~144.64~~	108.48	182	~~144.64~~	108.48	182	~~144.64~~	108.48
18.3	13.4	18300	~~144.64~~	108.48	183	~~144.64~~	108.48	183	~~144.64~~	108.48
18.4	13.4	18400	~~144.64~~	108.48	184	~~144.64~~	108.48	184	~~144.64~~	108.48
18.5	13.4	18500	~~144.64~~	108.48	185	~~144.64~~	108.48	185	~~144.64~~	108.48
18.6	13.4	18600	~~144.64~~	108.48	186	~~144.64~~	108.48	186	~~144.64~~	108.48
18.7	13.4	18700	~~144.64~~	108.48	187	~~144.64~~	108.48	187	~~144.64~~	108.48
18.8	13.4	18800	~~144.64~~	108.48	188	~~144.64~~	108.48	188	~~144.64~~	108.48
18.9	13.4	18900	~~144.64~~	108.48	189	~~144.64~~	108.48	189	~~144.64~~	108.48
19.0	13.4	19000	~~144.64~~	108.48	190	~~144.64~~	108.48	190	~~144.64~~	108.48
19.1	13.4	19100	~~144.64~~	108.48	191	~~144.64~~	108.48	191	~~144.64~~	108.48
19.2	13.4	19200	~~144.64~~	108.48	192	~~144.64~~	108.48	192	~~144.64~~	108.48
19.3	13.4	19300	~~144.64~~	108.48	193	~~144.64~~	108.48	193	~~144.64~~	108.48
19.4	13.4	19400	~~144.64~~	108.48	194	~~144.64~~	108.48	194	~~144.64~~	108.48
19.5	13.4	19500	~~144.64~~	108.48	195	~~144.64~~	108.48	195	~~144.64~~	108.48
19.6	13.4	19600	~~144.64~~	108.48	196	~~144.64~~	108.48	196	~~144.64~~	108.48
19.7	13.4	19700	~~144.64~~	108.48	197	~~144.64~~	108.48	197	~~144.64~~	108.48
19.8	13.4	19800	~~144.64~~	108.48	198	~~144.64~~	108.48	198	~~144.64~~	108.48
19.9	13.4	19900	~~144.64~~	108.48	199	~~144.64~~	108.48	199	~~144.64~~	108.48
20.0	13.4	20000	~~144.64~~	108.48	200	~~144.64~~	108.48	200	~~144.64~~	108.48
20.1	13.4	20100	~~159.84~~	119.88	201	~~159.84~~	119.88	201	~~120.52~~	90.39
20.2	13.4	20200	~~159.84~~	119.88	202	~~159.84~~	119.88	202	~~159.84~~	119.88
20.3	13.4	20300	~~159.84~~	119.88	203	~~159.84~~	119.88	203	~~159.84~~	119.88
20.4	13.4	20400	~~159.84~~	119.88	204	~~159.84~~	119.88	204	~~159.84~~	119.88
20.5	15.4	20500	~~159.84~~	119.88	205	~~159.84~~	119.88	205	~~159.84~~	119.88
20.6	15.4	20600	~~159.84~~	119.88	206	~~159.84~~	119.88	206	~~159.84~~	119.88
20.7	15.4	20700	~~159.84~~	119.88	207	~~159.84~~	119.88	207	~~159.84~~	119.88
20.8	15.4	20800	~~159.84~~	119.88	208	~~159.84~~	119.88	208	~~159.84~~	119.88
20.9	15.4	20900	~~159.84~~	119.88	209	~~159.84~~	119.88	209	~~159.84~~	119.88
21.0	15.4	21000	~~159.84~~	119.88	210	~~159.84~~	119.88	210	~~159.84~~	119.88
21.1	15.4	21100	~~159.84~~	119.88	211	~~159.84~~	119.88	211	~~159.84~~	119.88
21.2	15.4	21200	~~159.84~~	119.88	212	~~159.84~~	119.88	212	~~159.84~~	119.88
21.3	15.4	21300	~~159.84~~	119.88	213	~~159.84~~	119.88	213	~~159.84~~	119.88
21.4	15.4	21400	~~159.84~~	119.88	214	~~159.84~~	119.88	214	~~159.84~~	119.88
21.5	15.4	21500	~~159.84~~	119.88	215	~~159.84~~	119.88	215	~~159.84~~	119.88
21.6	15.4	21600	~~159.84~~	119.88	216	~~159.84~~	119.88	216	~~159.84~~	119.88
21.7	15.4	21700	~~159.84~~	119.88	217	~~159.84~~	119.88	217	~~159.84~~	119.88
21.8	15.4	21800	~~159.84~~	119.88	218	~~159.84~~	119.88	218	~~159.84~~	119.88
21.9	15.4	21900	~~159.84~~	119.88	219	~~159.84~~	119.88	219	~~159.84~~	119.88
22.0	15.4	22000	~~159.84~~	119.88	220	~~159.84~~	119.88	220	~~159.84~~	119.88
22.1	15.4	22100	~~171.54~~	128.66	221	~~171.54~~	128.66	221	~~171.54~~	128.66
22.2	15.4	22200	~~171.54~~	128.66	222	~~171.54~~	128.66	222	~~171.54~~	128.66
22.3	15.4	22300	~~171.54~~	128.66	223	~~171.54~~	128.66	223	~~171.54~~	128.66
22.4	15.4	22400	~~171.54~~	128.66	224	~~171.54~~	128.66	224	~~171.54~~	128.66
22.5	15.4	22500	~~171.54~~	128.66	225	~~171.54~~	128.66	225	~~171.54~~	128.66
22.6	15.4	22600	~~171.54~~	128.66	226	~~171.54~~	128.66	226	~~171.54~~	128.66
22.7	15.4	22700	~~171.54~~	128.66	227	~~171.54~~	128.66	227	~~171.54~~	128.66
22.8	15.4	22800	~~171.54~~	128.66	228	~~171.54~~	128.66	228	~~171.54~~	128.66
22.9	15.4	22900	~~171.54~~	128.66	229	~~171.54~~	128.66	229	~~171.54~~	128.66
23.0	15.4	23000	~~171.54~~	128.66	230	~~171.54~~	128.66	230	~~171.54~~	128.66
23.1	15.4	23100	~~171.54~~	128.66	231	~~171.54~~	128.66	231	~~171.54~~	128.66
23.2	15.4	23200	~~171.54~~	128.66	232	~~171.54~~	128.66	232	~~171.54~~	128.66
23.3	15.4	23300	~~171.54~~	128.66	233	~~171.54~~	128.66	233	~~171.54~~	128.66
23.4	15.4	23400	~~171.54~~	128.66	234	~~171.54~~	128.66	234	~~171.54~~	128.66
23.5	15.4	23500	~~171.54~~	128.66	235	~~171.54~~	128.66	235	~~171.54~~	128.66
23.6	15.4	23600	~~171.54~~	128.66	236	~~171.54~~	128.66	236	~~171.54~~	128.66
23.7	15.4	23700	~~171.54~~	128.66	237	~~171.54~~	128.66	237	~~171.54~~	128.66
23.8	15.4	23800	~~171.54~~	128.66	238	~~171.54~~	128.66	238	~~171.54~~	128.66
23.9	15.4	23900	~~171.54~~	128.66	239	~~171.54~~	128.66	239	~~171.54~~	128.66
24.0	15.4	24000	~~171.54~~	128.66	240	~~171.54~~	128.66	240	~~171.54~~	128.66
24.1	15.4	24100	~~186.75~~	140.06	241	~~198.44~~	148.83	241	~~198.44~~	148.83
24.2	15.4	24200	~~186.75~~	140.06	242	~~198.44~~	148.83	242	~~198.44~~	148.83
24.3	15.4	24300	~~186.75~~	140.06	243	~~198.44~~	148.83	243	~~198.44~~	148.83
24.4	15.4	24400	~~186.75~~	140.06	244	~~198.44~~	148.83	244	~~198.44~~	148.83
24.5	17.4	24500	~~186.75~~	140.06	245	~~198.44~~	148.83	245	~~198.44~~	148.83
24.6	17.4	24600	~~186.75~~	140.06	246	~~198.44~~	148.83	246	~~198.44~~	148.83
24.7	17.4	24700	~~186.75~~	140.06	247	~~198.44~~	148.83	247	~~198.44~~	148.83
24.8	17.4	24800	~~186.75~~	140.06	248	~~198.44~~	148.83	248	~~198.44~~	148.83
24.9	17.4	24900	~~186.75~~	140.06	249	~~198.44~~	148.83	249	~~198.44~~	148.83
25.0	17.4	25000	~~186.75~~	140.06	250	~~198.44~~	148.83	250	~~198.44~~	148.83
25.1	17.4	25100	~~186.75~~	140.06	251	~~198.44~~	148.83	251	~~198.44~~	148.83
25.2	17.4	25200	~~186.75~~	140.06	252	~~198.44~~	148.83	252	~~198.44~~	148.83
25.3	17.4	25300	~~186.75~~	140.06	253	~~198.44~~	148.83	253	~~198.44~~	148.83
25.4	17.4	25400	~~186.75~~	140.06	254	~~198.44~~	148.83	254	~~198.44~~	148.83
25.5	17.4	25500	~~186.75~~	140.06	255	~~198.44~~	148.83	255	~~198.44~~	148.83
25.6	17.4	25600	~~198.44~~	148.83	256	~~198.44~~	148.83	256	~~198.44~~	148.83
25.7	17.4	25700	~~198.44~~	148.83	257	~~198.44~~	148.83	257	~~198.44~~	148.83
25.8	17.4	25800	~~198.44~~	148.83	258	~~198.44~~	148.83	258	~~198.44~~	148.83
25.9	17.4	25900	~~198.44~~	148.83	259	~~198.44~~	148.83	259	~~198.44~~	148.83
26.0	17.4	26000	~~198.44~~	148.83	260	~~198.44~~	148.83	260	~~198.44~~	148.83
26.1	17.4	26100	~~198.44~~	148.83	261	~~198.44~~	148.83	261	~~198.44~~	148.83
26.2	17.4	26200	~~198.44~~	148.83	262	~~198.44~~	148.83	262	~~198.44~~	148.83
26.3	17.4	26300	~~198.44~~	148.83	263	~~198.44~~	148.83	263	~~198.44~~	148.83
26.4	17.4	26400	~~198.44~~	148.83	264	~~198.44~~	148.83	264	~~198.44~~	148.83
26.5	17.4	26500	~~198.44~~	148.83	265	~~198.44~~	148.83	265	~~198.44~~	148.83
26.6	17.4	26600	~~198.44~~	148.83	266	~~198.44~~	148.83	266	~~198.44~~	148.83
26.7	17.4	26700	~~198.44~~	148.83	267	~~198.44~~	148.83	267	~~198.44~~	148.83
26.8	17.4	26800	~~198.44~~	148.83	268	~~198.44~~	148.83	268	~~198.44~~	148.83
26.9	17.4	26900	~~198.44~~	148.83	269	~~198.44~~	148.83	269	~~198.44~~	148.83
27.0	17.4	27000	~~198.44~~	148.83	270	~~198.44~~	148.83	270	~~198.44~~	148.83
27.1	17.4	27100	~~198.44~~	148.83	271	~~198.44~~	148.83	271	~~198.44~~	148.83
27.2	17.4	27200	~~198.44~~	148.83	272	~~198.44~~	148.83	272	~~198.44~~	148.83
27.3	17.4	27300	~~198.44~~	148.83	273	~~198.44~~	148.83	273	~~198.44~~	148.83
27.4	17.4	27400	~~198.44~~	148.83	274	~~198.44~~	148.83	274	~~198.44~~	148.83
27.5	17.4	27500	~~198.44~~	148.83	275	~~198.44~~	148.83	275	~~198.44~~	148.83
27.6	17.4	27600	~~198.44~~	148.83	276	~~198.44~~	148.83	276	~~198.44~~	148.83
27.7	17.4	27700	~~198.44~~	148.83	277	~~198.44~~	148.83	277	~~198.44~~	148.83
27.8	17.4	27800	~~198.44~~	148.83	278	~~198.44~~	148.83	278	~~198.44~~	148.83
27.9	17.4	27900	~~198.44~~	148.83	279	~~198.44~~	148.83	279	~~198.44~~	148.83
28.0	17.4	28000	~~198.44~~	148.83	280	~~198.44~~	148.83	280	~~198.44~~	148.83
28.1	17.4	28100	~~217.02~~	162.77	281	~~217.02~~	162.77	281	~~217.02~~	162.77
28.2	17.4	28200	~~217.02~~	162.77	282	~~217.02~~	162.77	282	~~217.02~~	162.77
28.3	17.4	28300	~~217.02~~	162.77	283	~~217.02~~	162.77	283	~~217.02~~	162.77
28.4	17.4	28400	~~217.02~~	162.77	284	~~217.02~~	162.77	284	~~217.02~~	162.77
28.5	18.4	28500	~~217.02~~	162.77	285	~~217.02~~	162.77	285	~~217.02~~	162.77
28.6	18.4	28600	~~217.02~~	162.77	286	~~217.02~~	162.77	286	~~217.02~~	162.77
28.7	18.4	28700	~~217.02~~	162.77	287	~~217.02~~	162.77	287	~~217.02~~	162.77
28.8	18.4	28800	~~217.02~~	162.77	288	~~217.02~~	162.77	288	~~217.02~~	162.77
28.9	18.4	28900	~~217.02~~	162.77	289	~~217.02~~	162.77	289	~~217.02~~	162.77
29.0	18.4	29000	~~217.02~~	162.77	290	~~217.02~~	162.77	290	~~217.02~~	162.77
29.1	18.4	29100	~~217.02~~	162.77	291	~~217.02~~	162.77	291	~~217.02~~	162.77
29.2	18.4	29200	~~217.02~~	162.77	292	~~217.02~~	162.77	292	~~217.02~~	162.77
29.3	18.4	29300	~~217.02~~	162.77	293	~~217.02~~	162.77	293	~~217.02~~	162.77
29.4	18.4	29400	~~217.02~~	162.77	294	~~217.02~~	162.77	294	~~217.02~~	162.77
29.5	18.4	29500	~~217.02~~	162.77	295	~~217.02~~	162.77	295	~~217.02~~	162.77
29.6	18.4	29600	~~217.02~~	162.77	296	~~217.02~~	162.77	296	~~217.02~~	162.77
29.7	18.4	29700	~~217.02~~	162.77	297	~~217.02~~	162.77	297	~~217.02~~	162.77
29.8	18.4	29800	~~217.02~~	162.77	298	~~217.02~~	162.77	298	~~217.02~~	162.77
29.9	18.4	29900	~~217.02~~	162.77	299	~~217.02~~	162.77	299	~~217.02~~	162.77
30.0	18.4	30000	~~217.02~~	162.77	300	~~217.02~~	162.77	300	~~217.02~~	162.77
30.1	18.4	30100	~~242.16~~	181.62	301	~~242.16~~	181.62	301	~~242.16~~	181.62
30.2	18.4	30200	~~242.16~~	181.62	302	~~242.16~~	181.62	302	~~242.16~~	181.62
30.3	18.4	30300	~~242.16~~	181.62	303	~~242.16~~	181.62	303	~~242.16~~	181.62
30.4	18.4	30400	~~242.16~~	181.62	304	~~242.16~~	181.62	304	~~242.16~~	181.62
30.5	18.4	30500	~~242.16~~	181.62	305	~~242.16~~	181.62	305	~~242.16~~	181.62
30.6	18.4	30600	~~242.16~~	181.62	306	~~242.16~~	181.62	306	~~242.16~~	181.62
30.7	18.4	30700	~~242.16~~	181.62	307	~~242.16~~	181.62	307	~~242.16~~	181.62
30.8	18.4	30800	~~242.16~~	181.62	308	~~242.16~~	181.62	308	~~242.16~~	181.62
30.9	18.4	30900	~~242.16~~	181.62	309	~~242.16~~	181.62	309	~~242.16~~	181.62
31.0	18.4	31000	~~242.16~~	181.62	310	~~242.16~~	181.62	310	~~242.16~~	181.62
31.1	18.4	31100	~~242.16~~	181.62	311	~~242.16~~	181.62	311	~~242.16~~	181.62
31.2	18.4	31200	~~242.16~~	181.62	312	~~242.16~~	181.62	312	~~242.16~~	181.62
31.3	18.4	31300	~~242.16~~	181.62	313	~~242.16~~	181.62	313	~~242.16~~	181.62
31.4	18.4	31400	~~242.16~~	181.62	314	~~242.16~~	181.62	314	~~242.16~~	181.62
31.5	18.4	31500	~~242.16~~	181.62	315	~~242.16~~	181.62	315	~~242.16~~	181.62
31.6	18.4	31600	~~242.16~~	181.62	316	~~242.16~~	181.62	316	~~242.16~~	181.62
31.7	18.4	31700	~~242.16~~	181.62	317	~~242.16~~	181.62	317	~~242.16~~	181.62
31.8	18.4	31800	~~242.16~~	181.62	318	~~242.16~~	181.62	318	~~242.16~~	181.62
31.9	18.4	31900	~~242.16~~	181.62	319	~~242.16~~	181.62	319	~~242.16~~	181.62
32.0	18.4	32000	~~242.16~~	181.62	320	~~242.16~~	181.62	320	~~242.16~~	181.62
32.5	24.3	32500	~~259.21~~	194.41						
33.0	24.3	33000	~~259.21~~	194.41						
33.5	24.3	33500	~~259.21~~	194.41						
34.0	24.3	34000	~~259.21~~	194.41						
34.5	24.3	34500	~~259.21~~	194.41						
35.0	24.3	35000	~~259.21~~	194.41						
35.5	26.3	35500	~~296.47~~	222.35						
36.0	26.3	36000	~~296.47~~	222.35						
36.5	26.3	36500	~~296.47~~	222.35						
37.0	26.3	37000	~~296.47~~	222.35						
37.5	26.3	37500	~~296.47~~	222.35						
38.0	26.3	38000	~~296.47~~	222.35						
38.5	26.3	38500	~~322.25~~	241.69						
39.0	26.3	39000	~~322.25~~	241.69						
39.5	26.3	39500	~~322.25~~	241.69						
40.0	26.3	40000	~~322.25~~	241.69						
40.5	26.3	40500	~~322.25~~	241.69						
41.0	26.3	41000	~~322.25~~	241.69						

	10 919 ...	10 921 ...	10 922 ...
P	●	○	
M		●	
K	●	●	
N			●
S		●	
H			
O			

INDEXABLE INSERT DRILLS



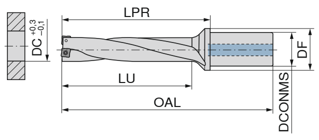
MaxiDrill 900 – the first choice for the vast majority of indexable insert drilling applications in all materials.



KUB Pentron – high performance problem solver with large selection of diameters and grades – see catalogue for full programme.

MaxiDrill 900 – Indexable insert drill

Scope of supply:
Indexable Insert Drill including clamping screws and key



≤ 2xD

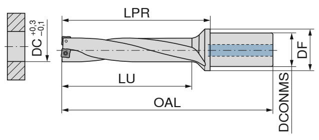
KOMET \ Standard

Designation	DC	DF	DCONMS	OAL	LU	LPR	Insert	10 852 ...		PG 2B/41
	mm	mm	mm	mm	mm	mm			£	£
MD900.2D.120.R.03-C20	12.0	28	20	90	24	40	SONT 031804	**120**	~~244.36~~	116.00
MD900.2D.125.R.03-C20	12.5	28	20	91	25	41	SONT 031804	**125**	~~244.36~~	116.00
MD900.2D.130.R.03-C20	13.0	28	20	92	26	42	SONT 031804	**130**	~~244.36~~	116.00
MD900.2D.135.R.03-C20	13.5	28	20	93	27	43	SONT 031804	**135**	~~244.36~~	116.00
MD900.2D.140.R.04-C20	14.0	30	20	96	28	46	SONT 042105	**140**	~~260.10~~	124.00
MD900.2D.145.R.04-C20	14.5	30	20	97	29	47	SONT 042105	**145**	~~260.10~~	124.00
MD900.2D.150.R.04-C20	15.0	30	20	98	30	48	SONT 042105	**150**	~~260.10~~	124.00
MD900.2D.155.R.04-C20	15.5	30	20	99	31	49	SONT 042105	**155**	~~260.10~~	124.00
MD900.2D.160.R.05-C20	16.0	30	20	100	32	50	SONT 052306	**160**	~~260.10~~	124.00
MD900.2D.165.R.05-C20	16.5	30	20	101	33	51	SONT 052306	**165**	~~260.10~~	124.00
MD900.2D.170.R.05-C20	17.0	30	20	102	34	52	SONT 052306	**170**	~~276.82~~	132.00
MD900.2D.175.R.05-C20	17.5	30	20	103	35	53	SONT 052306	**175**	~~276.82~~	132.00
MD900.2D.180.R.06-C25	18.0	32	25	111	36	55	SONT 062506	**180**	~~276.82~~	132.00
MD900.2D.185.R.06-C25	18.5	32	25	112	37	56	SONT 062506	**185**	~~276.82~~	132.00
MD900.2D.190.R.06-C25	19.0	32	25	113	38	57	SONT 062506	**190**	~~297.48~~	142.00
MD900.2D.195.R.06-C25	19.5	32	25	114	39	58	SONT 062506	**195**	~~297.48~~	142.00
MD900.2D.200.R.06-C25	20.0	32	25	115	40	59	SONT 062506	**200**	~~297.48~~	142.00
MD900.2D.205.R.06-C25	20.5	32	25	116	41	60	SONT 062506	**205**	~~297.48~~	142.00
MD900.2D.210.R.07-C25	21.0	32	25	118	42	62	SONT 072907	**210**	~~297.48~~	142.00
MD900.2D.220.R.07-C25	22.0	32	25	120	44	64	SONT 072907	**220**	~~297.48~~	142.00
MD900.2D.230.R.07-C25	23.0	32	25	122	46	66	SONT 072907	**230**	~~306.79~~	146.00
MD900.2D.240.R.08-C32	24.0	40	32	132	48	72	SONT 083308	**240**	~~306.79~~	146.00
MD900.2D.250.R.08-C32	25.0	40	32	134	50	74	SONT 083308	**250**	~~306.79~~	146.00
MD900.2D.260.R.08-C32	26.0	40	32	136	52	76	SONT 083308	**260**	~~339.66~~	162.00
MD900.2D.270.R.08-C32	27.0	40	32	138	54	78	SONT 083308	**270**	~~339.66~~	162.00
MD900.2D.280.R.09-C32	28.0	40	32	140	56	80	SONT 093808	**280**	~~339.66~~	162.00
MD900.2D.290.R.09-C32	29.0	40	32	142	58	82	SONT 093808	**290**	~~339.66~~	162.00
MD900.2D.300.R.09-C32	30.0	40	32	144	60	84	SONT 093808	**300**	~~339.66~~	162.00
MD900.2D.310.R.09-C32	31.0	40	32	146	62	86	SONT 093808	**310**	~~368.43~~	175.00
MD900.2D.320.R.09-C32	32.0	40	32	148	64	88	SONT 093808	**320**	~~368.43~~	175.00
MD900.2D.330.R.10-C40	33.0	50	40	163	66	93	SONT 104408	**330**	~~368.43~~	175.00
MD900.2D.340.R.10-C40	34.0	50	40	165	68	95	SONT 104408	**340**	~~368.43~~	175.00

Designation	DC	DF	DCONMS	OAL	LU	LPR	Insert	10 852 ...		PG 2B/41
	mm	mm	mm	mm	mm	mm			£	£
MD900.2D.350.R.10-C40	35.0	50	40	167	70	97	SONT 104408	**350**	~~376.76~~	179.00
MD900.2D.360.R.10-C40	36.0	50	40	169	72	99	SONT 104408	**360**	~~376.76~~	179.00
MD900.2D.370.R.12-C40	37.0	56	40	174	74	104	SONT 124810	**370**	~~388.98~~	185.00
MD900.2D.380.R.12-C40	38.0	56	40	176	76	106	SONT 124810	**380**	~~388.98~~	185.00
MD900.2D.390.R.12-C40	39.0	56	40	178	78	108	SONT 124810	**390**	~~388.98~~	185.00
MD900.2D.400.R.12-C40	40.0	56	40	180	80	110	SONT 124810	**400**	~~388.98~~	185.00
MD900.2D.410.R.12-C40	41.0	56	40	182	82	112	SONT 124810	**410**	~~388.98~~	185.00
MD900.2D.420.R.13-C40	42.0	60	40	187	84	117	SONT 135012	**420**	~~408.63~~	195.00
MD900.2D.430.R.13-C40	43.0	60	40	189	86	119	SONT 135012	**430**	~~408.63~~	195.00
MD900.2D.440.R.13-C40	44.0	60	40	191	88	121	SONT 135012	**440**	~~408.63~~	195.00
MD900.2D.450.R.13-C40	45.0	60	40	193	90	123	SONT 135012	**450**	~~408.63~~	195.00
MD900.2D.460.R.13-C40	46.0	60	40	195	92	125	SONT 135012	**460**	~~408.63~~	195.00
MD900.2D.470.R.15-C40	47.0	60	40	198	94	128	SONT 155312	**470**	~~429.27~~	204.00
MD900.2D.480.R.15-C40	48.0	60	40	200	96	130	SONT 155312	**480**	~~429.27~~	204.00
MD900.2D.490.R.15-C40	49.0	60	40	202	98	132	SONT 155312	**490**	~~463.14~~	221.00
MD900.2D.500.R.15-C40	50.0	60	40	204	100	134	SONT 155312	**500**	~~463.14~~	221.00
MD900.2D.510.R.15-C40	52.0	60	40	208	104	138	SONT 155312	**520**	~~475.58~~	226.00
MD900.2D.520.R.15-C40	51.0	60	40	206	102	136	SONT 155312	**510**	~~475.58~~	226.00
MD900.2D.530.R.15-C40	53.0	60	40	210	106	140	SONT 155312	**530**	~~475.58~~	226.00
MD900.2D.540.R.15-C40	54.0	60	40	212	108	142	SONT 155312	**540**	~~475.58~~	226.00
MD900.2D.550.R.17-C40	55.0	60	40	215	110	145	SONT 175612	**550**	~~475.58~~	226.00
MD900.2D.560.R.17-C40	56.0	60	40	217	112	147	SONT 175612	**560**	~~493.02~~	235.00
MD900.2D.570.R.17-C40	57.0	60	40	219	114	149	SONT 175612	**570**	~~493.02~~	235.00
MD900.2D.580.R.17-C40	58.0	60	40	221	116	151	SONT 175612	**580**	~~493.02~~	235.00
MD900.2D.590.R.17-C40	59.0	60	40	223	118	153	SONT 175612	**590**	~~493.02~~	235.00
MD900.2D.600.R.17-C40	60.0	62	40	225	120	155	SONT 175612	**600**	~~493.02~~	235.00
MD900.2D.610.R.17-C40	61.0	62	40	227	122	157	SONT 175612	**610**	~~493.02~~	235.00
MD900.2D.620.R.17-C40	62.0	64	40	229	124	159	SONT 175612	**620**	~~493.02~~	235.00
MD900.2D.630.R.17-C40	63.0	64	40	231	126	161	SONT 175612	**630**	~~493.02~~	235.00

MaxiDrill 900 – Indexable insert drill

Scope of supply:
Indexable Insert Drill including clamping screws and key



≤ 3xD

KOMET \ Standard

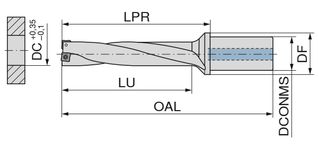
TCS
Ø 16-40 mm

Designation	DC	DF	DCONMS	OAL	LU	LPR	Insert	10 853 ...		PG 2B/41
	mm	mm	mm	mm	mm	mm			£	£
MD900.3D.120.R.03-C20	12.0	28	20	102	36.0	52	SONT 031804	**120**	~~260.28~~	124.00
MD900.3D.125.R.03-C20	12.5	28	20	104	37.5	54	SONT 031804	**125**	~~260.28~~	124.00
MD900.3D.130.R.03-C20	13.0	28	20	105	39.0	55	SONT 031804	**130**	~~260.28~~	124.00
MD900.3D.135.R.03-C20	13.5	28	20	107	40.5	57	SONT 031804	**135**	~~260.28~~	124.00
MD900.3D.140.R.04-C20	14.0	30	20	109	42.0	59	SONT 042105	**140**	~~274.12~~	131.00
MD900.3D.145.R.04-C20	14.5	30	20	111	44.0	61	SONT 042105	**145**	~~274.12~~	131.00
MD900.3D.150.R.04-C20	15.0	30	20	112	45.0	62	SONT 042105	**150**	~~274.12~~	131.00
MD900.3D.155.R.04-C20	15.5	30	20	114	47.0	64	SONT 042105	**155**	~~280.64~~	134.00
MD900.3D.160.R.05-C20	16.0	30	20	115	48.0	65	SONT 052306	**160**	~~280.64~~	134.00
MD900.3D.165.R.05-C20	16.5	30	20	117	50.0	67	SONT 052306	**165**	~~280.64~~	134.00
MD900.3D.170.R.05-C20	17.0	30	20	118	51.0	68	SONT 052306	**170**	~~291.46~~	139.00
MD900.3D.175.R.05-C20	17.5	30	20	120	53.0	70	SONT 052306	**175**	~~291.46~~	139.00
MD900.3D.180.R.06-C25	18.0	32	25	128	54.0	72	SONT 062506	**180**	~~291.46~~	139.00
MD900.3D.185.R.06-C25	18.5	32	25	130	56.0	74	SONT 062506	**185**	~~291.46~~	139.00
MD900.3D.190.R.06-C25	19.0	32	25	131	57.0	75	SONT 062506	**190**	~~313.11~~	149.00
MD900.3D.195.R.06-C25	19.5	32	25	133	59.0	77	SONT 062506	**195**	~~313.11~~	149.00
MD900.3D.200.R.06-C25	20.0	32	25	134	60.0	78	SONT 062506	**200**	~~313.11~~	149.00
MD900.3D.205.R.06-C25	20.5	32	25	136	62.0	80	SONT 062506	**205**	~~313.11~~	149.00
MD900.3D.210.R.07-C25	21.0	32	25	138	63.0	82	SONT 072907	**210**	~~313.11~~	149.00
MD900.3D.215.R.07-C25	21.5	32	25	140	65.0	84	SONT 072907	**215**	~~313.11~~	149.00
MD900.3D.220.R.07-C25	22.0	32	25	141	66.0	85	SONT 072907	**220**	~~313.11~~	149.00
MD900.3D.225.R.07-C25	22.5	32	25	143	68.0	87	SONT 072907	**225**	~~322.83~~	154.00
MD900.3D.230.R.07-C25	23.0	32	25	144	69.0	88	SONT 072907	**230**	~~322.83~~	154.00
MD900.3D.235.R.07-C25	23.5	32	25	146	71.0	90	SONT 072907	**235**	~~322.83~~	154.00
MD900.3D.240.R.08-C32	24.0	40	32	155	72.0	95	SONT 083308	**240**	~~322.83~~	154.00
MD900.3D.245.R.08-C32	24.5	40	32	157	74.0	97	SONT 083308	**245**	~~322.83~~	154.00
MD900.3D.250.R.08-C32	25.0	40	32	158	75.0	98	SONT 083308	**250**	~~322.83~~	154.00
MD900.3D.255.R.08-C32	25.5	40	32	160	77.0	100	SONT 083308	**255**	~~322.83~~	154.00
MD900.3D.260.R.08-C32	26.0	40	32	161	78.0	101	SONT 083308	**260**	~~357.50~~	170.00
MD900.3D.265.R.08-C32	26.5	40	32	163	80.0	103	SONT 083308	**265**	~~357.50~~	170.00
MD900.3D.270.R.08-C32	27.0	40	32	164	81.0	104	SONT 083308	**270**	~~357.50~~	170.00
MD900.3D.275.R.08-C32	27.5	40	32	166	83.0	106	SONT 083308	**275**	~~357.50~~	170.00
MD900.3D.280.R.09-C32	28.0	40	32	167	84.0	107	SONT 093808	**280**	~~357.50~~	170.00
MD900.3D.285.R.09-C32	28.5	40	32	169	86.0	109	SONT 093808	**285**	~~357.50~~	170.00
MD900.3D.290.R.09-C32	29.0	40	32	170	87.0	110	SONT 093808	**290**	~~357.50~~	170.00
MD900.3D.295.R.09-C32	29.5	40	32	172	89.0	112	SONT 093808	**295**	~~357.50~~	170.00
MD900.3D.300.R.09-C32	30.0	40	32	173	90.0	113	SONT 093808	**300**	~~357.50~~	170.00
MD900.3D.305.R.09-C32	30.5	40	32	175	92.0	115	SONT 093808	**305**	~~357.50~~	170.00

Designation	DC	DF	DCONMS	OAL	LU	LPR	Insert	10 853 ...		PG 2B/41
	mm	mm	mm	mm	mm	mm			£	£
MD900.3D.310.R.09-C32	31.0	40	32	176	93.0	116	SONT 093808	**310**	~~387.88~~	185.00
MD900.3D.315.R.09-C32	31.5	40	32	178	95.0	118	SONT 093808	**315**	~~387.88~~	185.00
MD900.3D.320.R.09-C32	32.0	40	32	179	96.0	119	SONT 093808	**320**	~~387.88~~	185.00
MD900.3D.325.R.10-C40	32.5	50	40	192	98.0	124	SONT 104408	**325**	~~387.88~~	185.00
MD900.3D.330.R.10-C40	33.0	50	40	193	99.0	125	SONT 104408	**330**	~~387.88~~	185.00
MD900.3D.335.R.10-C40	33.5	50	40	195	101.0	127	SONT 104408	**335**	~~387.88~~	185.00
MD900.3D.340.R.10-C40	34.0	50	40	196	102.0	128	SONT 104408	**340**	~~387.88~~	185.00
MD900.3D.345.R.10-C40	34.5	50	40	198	104.0	130	SONT 104408	**345**	~~387.88~~	185.00
MD900.3D.350.R.10-C40	35.0	50	40	199	105.0	131	SONT 104408	**350**	~~396.50~~	189.00
MD900.3D.355.R.10-C40	35.5	50	40	201	107.0	133	SONT 104408	**355**	~~396.50~~	189.00
MD900.3D.360.R.10-C40	36.0	50	40	202	108.0	134	SONT 104408	**360**	~~396.50~~	189.00
MD900.3D.365.R.10-C40	36.5	50	40	204	110.0	136	SONT 104408	**365**	~~396.50~~	189.00
MD900.3D.370.R.12-C40	37.0	56	40	211	111.0	141	SONT 124810	**370**	~~409.52~~	195.00
MD900.3D.380.R.12-C40	38.0	56	40	214	114.0	144	SONT 124810	**380**	~~409.52~~	195.00
MD900.3D.390.R.12-C40	39.0	56	40	217	117.0	147	SONT 124810	**390**	~~409.52~~	195.00
MD900.3D.400.R.12-C40	40.0	56	40	220	120.0	150	SONT 124810	**400**	~~409.52~~	195.00
MD900.3D.410.R.12-C40	41.0	56	40	223	123.0	153	SONT 124810	**410**	~~409.52~~	195.00
MD900.3D.420.R.13-C40	42.0	60	40	229	126.0	159	SONT 135012	**420**	~~430.07~~	205.00
MD900.3D.430.R.13-C40	43.0	60	40	232	129.0	162	SONT 135012	**430**	~~430.07~~	205.00
MD900.3D.440.R.13-C40	44.0	60	40	235	132.0	165	SONT 135012	**440**	~~430.07~~	205.00
MD900.3D.450.R.13-C40	45.0	60	40	238	135.0	168	SONT 135012	**450**	~~430.07~~	205.00
MD900.3D.460.R.13-C40	46.0	60	40	241	138.0	171	SONT 135012	**460**	~~430.07~~	205.00
MD900.3D.470.R.15-C40	47.0	60	40	245	141.0	175	SONT 155312	**470**	~~451.73~~	215.00
MD900.3D.480.R.15-C40	48.0	60	40	248	144.0	178	SONT 155312	**480**	~~451.73~~	215.00
MD900.3D.490.R.15-C40	49.0	60	40	251	147.0	181	SONT 155312	**490**	~~487.50~~	232.00
MD900.3D.500.R.15-C40	50.0	60	40	254	150.0	184	SONT 155312	**500**	~~487.50~~	232.00
MD900.3D.510.R.15-C40	51.0	60	40	257	153.0	187	SONT 155312	**510**	~~500.54~~	238.00
MD900.3D.520.R.15-C40	52.0	60	40	260	156.0	190	SONT 155312	**520**	~~500.54~~	238.00
MD900.3D.530.R.15-C40	53.0	60	40	263	159.0	193	SONT 155312	**530**	~~500.54~~	238.00
MD900.3D.540.R.15-C40	54.0	60	40	266	162.0	196	SONT 155312	**540**	~~500.54~~	238.00
MD900.3D.550.R.17-C40	55.0	60	40	270	165.0	200	SONT 175612	**550**	~~500.54~~	238.00
MD900.3D.560.R.17-C40	56.0	60	40	273	168.0	203	SONT 175612	**560**	~~518.98~~	247.00
MD900.3D.570.R.17-C40	57.0	60	40	276	171.0	206	SONT 175612	**570**	~~518.98~~	247.00
MD900.3D.580.R.17-C40	58.0	60	40	279	174.0	209	SONT 175612	**580**	~~518.98~~	247.00
MD900.3D.590.R.17-C40	59.0	60	40	282	177.0	212	SONT 175612	**590**	~~518.98~~	247.00
MD900.3D.600.R.17-C40	60.0	62	40	285	180.0	215	SONT 175612	**600**	~~518.98~~	247.00
MD900.3D.610.R.17-C40	61.0	62	40	288	183.0	218	SONT 175612	**610**	~~518.98~~	247.00
MD900.3D.620.R.17-C40	62.0	64	40	291	186.0	221	SONT 175612	**620**	~~518.98~~	247.00
MD900.3D.630.R.17-C40	63.0	64	40	294	189.0	224	SONT 175612	**630**	~~518.98~~	247.00

MaxiDrill 900 – Indexable insert drill

Scope of supply:
Indexable Insert Drill including clamping screws and key



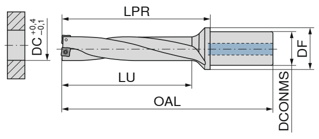
≤ 4xD

KOMET \ Standard

Designation	DC mm	DF mm	DCONMS mm	OAL mm	LU mm	LPR mm	Insert	10 854 ...	PG 2B/41 £	£
MD900.4D.120.R.03-C20	12	28	20	114	48	64	SONT 031804	**120**	~~359.02~~	171.00
MD900.4D.130.R.03-C20	13	28	20	118	52	68	SONT 031804	**130**	~~359.02~~	171.00
MD900.4D.140.R.04-C20	14	30	20	123	56	73	SONT 042105	**140**	~~369.43~~	176.00
MD900.4D.150.R.04-C20	15	30	20	127	60	77	SONT 042105	**150**	~~369.43~~	176.00
MD900.4D.160.R.05-C20	16	30	20	131	64	81	SONT 052306	**160**	~~378.06~~	180.00
MD900.4D.170.R.05-C20	17	30	20	135	68	85	SONT 052306	**170**	~~392.29~~	187.00
MD900.4D.180.R.06-C25	18	32	25	146	72	90	SONT 062506	**180**	~~392.29~~	187.00
MD900.4D.190.R.06-C25	19	32	25	150	76	94	SONT 062506	**190**	~~421.45~~	201.00
MD900.4D.200.R.06-C25	20	32	25	154	80	98	SONT 062506	**200**	~~421.45~~	201.00
MD900.4D.210.R.07-C25	21	32	25	159	84	103	SONT 072907	**210**	~~421.45~~	201.00
MD900.4D.220.R.07-C25	22	32	25	163	88	107	SONT 072907	**220**	~~421.45~~	201.00
MD900.4D.230.R.07-C25	23	32	25	167	92	111	SONT 072907	**230**	~~435.49~~	207.00
MD900.4D.240.R.08-C32	24	40	32	179	96	119	SONT 083308	**240**	~~435.49~~	207.00
MD900.4D.250.R.08-C32	25	40	32	183	100	123	SONT 083308	**250**	~~435.49~~	207.00
MD900.4D.260.R.08-C32	26	40	32	187	104	127	SONT 083308	**260**	~~481.09~~	229.00
MD900.4D.270.R.08-C32	27	40	32	191	108	131	SONT 083308	**270**	~~481.09~~	229.00
MD900.4D.280.R.09-C32	28	40	32	195	112	135	SONT 093808	**280**	~~481.09~~	229.00
MD900.4D.290.R.09-C32	29	40	32	199	116	139	SONT 093808	**290**	~~481.09~~	229.00
MD900.4D.300.R.09-C32	30	40	32	203	120	143	SONT 093808	**300**	~~481.09~~	229.00
MD900.4D.310.R.09-C32	31	40	32	207	124	147	SONT 093808	**310**	~~522.19~~	249.00
MD900.4D.320.R.09-C32	32	40	32	211	128	151	SONT 093808	**320**	~~522.19~~	249.00
MD900.4D.330.R.10-C40	33	50	40	228	132	158	SONT 104408	**330**	~~522.19~~	249.00
MD900.4D.340.R.10-C40	34	50	40	232	136	162	SONT 104408	**340**	~~522.19~~	249.00
MD900.4D.350.R.10-C40	35	50	40	236	140	166	SONT 104408	**350**	~~533.12~~	254.00
MD900.4D.360.R.10-C40	36	50	40	240	144	170	SONT 104408	**360**	~~533.12~~	254.00
MD900.4D.370.R.12-C40	37	56	40	248	148	178	SONT 124810	**370**	~~551.45~~	263.00
MD900.4D.380.R.12-C40	38	56	40	252	152	182	SONT 124810	**380**	~~551.45~~	263.00
MD900.4D.390.R.12-C40	39	56	40	256	156	186	SONT 124810	**390**	~~551.45~~	263.00
MD900.4D.400.R.12-C40	40	56	40	260	160	190	SONT 124810	**400**	~~551.45~~	263.00
MD900.4D.410.R.12-C40	41	56	40	264	164	194	SONT 124810	**410**	~~551.45~~	263.00
MD900.4D.420.R.13-C40	42	60	40	271	168	201	SONT 135012	**420**	~~578.52~~	275.00
MD900.4D.430.R.13-C40	43	60	40	275	172	205	SONT 135012	**430**	~~578.52~~	275.00
MD900.4D.440.R.13-C40	44	60	40	279	176	209	SONT 135012	**440**	~~578.52~~	275.00
MD900.4D.450.R.13-C40	45	60	40	283	180	213	SONT 135012	**450**	~~578.52~~	275.00
MD900.4D.460.R.13-C40	46	60	40	287	184	217	SONT 135012	**460**	~~578.52~~	275.00
MD900.4D.470.R.15-C40	47	60	40	292	188	222	SONT 155312	**470**	~~609.98~~	290.00
MD900.4D.480.R.15-C40	48	60	40	296	192	226	SONT 155312	**480**	~~609.98~~	290.00
MD900.4D.490.R.15-C40	49	60	40	300	196	230	SONT 155312	**490**	~~609.98~~	290.00
MD900.4D.500.R.15-C40	50	60	40	304	200	234	SONT 155312	**500**	~~609.98~~	290.00
MD900.4D.510.R.15-C40	51	60	40	308	204	238	SONT 155312	**510**	~~609.98~~	290.00
MD900.4D.520.R.15-C40	52	60	40	312	208	242	SONT 155312	**520**	~~609.98~~	290.00
MD900.4D.530.R.15-C40	53	60	40	316	212	246	SONT 155312	**530**	~~609.98~~	290.00
MD900.4D.540.R.15-C40	54	60	40	320	216	250	SONT 155312	**540**	~~609.98~~	290.00

MaxiDrill 900 – Indexable insert drill

Scope of supply:
Indexable Insert Drill including clamping screws and key



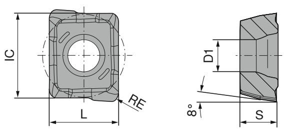
≤ 5xD

KOMET \ Standard

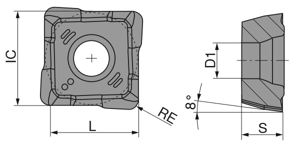
Designation	DC mm	DF mm	DCONMS mm	OAL mm	LU mm	LPR mm	Insert	10 855 ...	PG 2B/41 £	£
MD900.5D.120.R.03-C20	12	28	20	126	60	76	SONT 031804	**120**	~~429.17~~	204.00
MD900.5D.130.R.03-C20	13	28	20	131	65	81	SONT 031804	**130**	~~429.17~~	204.00
MD900.5D.140.R.04-C20	14	30	20	137	70	87	SONT 042105	**140**	~~438.80~~	209.00
MD900.5D.150.R.04-C20	15	30	20	142	75	92	SONT 042105	**150**	~~438.80~~	209.00
MD900.5D.160.R.05-C20	16	30	20	147	80	97	SONT 052306	**160**	~~449.62~~	214.00
MD900.5D.170.R.05-C20	17	30	20	152	85	102	SONT 052306	**170**	~~465.86~~	222.00
MD900.5D.180.R.06-C25	18	32	25	164	90	108	SONT 062506	**180**	~~465.86~~	222.00
MD900.5D.190.R.06-C25	19	32	25	169	95	113	SONT 062506	**190**	~~500.54~~	238.00
MD900.5D.200.R.06-C25	20	32	25	174	100	118	SONT 062506	**200**	~~500.54~~	238.00
MD900.5D.210.R.07-C25	21	32	25	180	105	124	SONT 072907	**210**	~~500.54~~	238.00
MD900.5D.220.R.07-C25	22	32	25	184	110	128	SONT 072907	**220**	~~500.54~~	238.00
MD900.5D.230.R.07-C25	23	32	25	189	115	133	SONT 072907	**230**	~~518.37~~	247.00
MD900.5D.240.R.08-C32	24	40	32	203	120	143	SONT 083308	**240**	~~518.37~~	247.00
MD900.5D.250.R.08-C32	25	40	32	208	125	148	SONT 083308	**250**	~~518.37~~	247.00
MD900.5D.260.R.08-C32	26	40	32	212	130	152	SONT 083308	**260**	~~572.10~~	272.00
MD900.5D.270.R.08-C32	27	40	32	217	135	157	SONT 083308	**270**	~~572.10~~	272.00
MD900.5D.280.R.09-C32	28	40	32	221	140	161	SONT 093808	**280**	~~572.10~~	272.00
MD900.5D.290.R.09-C32	29	40	32	226	145	166	SONT 093808	**290**	~~572.10~~	272.00
MD900.5D.300.R.09-C32	30	40	32	230	150	170	SONT 093808	**300**	~~572.10~~	272.00
MD900.5D.310.R.09-C32	31	40	32	235	155	175	SONT 093808	**310**	~~619.70~~	295.00
MD900.5D.320.R.09-C32	32	40	32	239	160	179	SONT 093808	**320**	~~619.70~~	295.00
MD900.5D.330.R.10-C40	33	50	40	259	165	191	SONT 104408	**330**	~~619.70~~	295.00
MD900.5D.340.R.10-C40	34	50	40	264	170	196	SONT 104408	**340**	~~619.70~~	295.00
MD900.5D.350.R.10-C40	35	50	40	269	175	201	SONT 104408	**350**	~~633.74~~	302.00
MD900.5D.360.R.10-C40	36	50	40	274	180	206	SONT 104408	**360**	~~633.74~~	302.00
MD900.5D.370.R.12-C40	37	56	40	285	185	215	SONT 124810	**370**	~~655.49~~	312.00
MD900.5D.380.R.12-C40	38	56	40	290	190	220	SONT 124810	**380**	~~655.49~~	312.00
MD900.5D.390.R.12-C40	39	56	40	295	195	225	SONT 124810	**390**	~~655.49~~	312.00
MD900.5D.400.R.12-C40	40	56	40	300	200	230	SONT 124810	**400**	~~655.49~~	312.00
MD900.5D.410.R.12-C40	41	56	40	305	205	235	SONT 124810	**410**	~~655.49~~	312.00

SONT

Designation	IC mm	D1 mm	L mm	S mm
SONT 0318..	5.4	2.10	3.8	1.80
SONT 0421..	4.6	2.25	4.2	2.10
SONT 0523..	5.3	2.25	4.8	2.30
SONT 0625..	5.9	2.50	5.5	2.50
SONT 0729..	6.5	2.50	6.1	2.90
SONT 0833..	7.7	2.90	7.3	3.30
SONT 0938..	8.9	3.50	8.5	3.80
SONT 1044..	10.1	4.10	9.6	4.40
SONT 1248..	11.6	4.10	11.0	4.80
SONT 1350..	13.0	5.30	12.2	5.00
SONT 1553..	15.2	5.30	14.4	5.30
SONT 1756..	17.5	5.30	16.7	5.60



SONT 03..



SONT 04../05../06../07../08../09../
10../12../13../15../17..

SONT

KOMET \ Standard

-M30
CTPP430
DRAGONSKIN

-M30
CTPP430
DRAGONSKIN

ISO	RE mm	10 830 ...	PG 1A/08 £	£	10 830 ...	PG 1A/08 £	£
031804	0.4	**103** [1]	~~12.14~~	9.11			
042105	0.5				**104**	~~13.91~~	10.43
052306	0.6				**105**	~~14.10~~	10.58
062506	0.6				**106**	~~14.33~~	10.75
072907	0.7				**107**	~~14.65~~	10.99
083308	0.8				**108**	~~14.97~~	11.23
093808	0.8				**109**	~~15.34~~	11.51
104408	0.8				**110**	~~16.07~~	12.05
124810	1.0				**112**	~~17.02~~	12.77
135012	1.2				**113**	~~18.03~~	13.52
155312	1.2				**115**	~~20.44~~	15.33
175612	1.2				**117**	~~21.66~~	16.25

P	●	●
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[1] two usable cutting edges

REAMING

Fullmax – high performance solid carbide machine reamer for through and blind hole reaming in all materials.

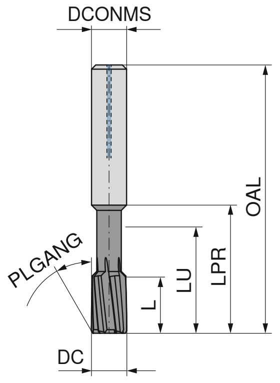
Type N – for all standard low volume applications.

Fullmax – High-performance machine reamers, short

- ▲ extremely irregular pitch
- ▲ designed for high-speed machining
- ▲ specialised geometries and coatings
- ▲ tolerance: Ø 2,96 – 5,96 mm = +0,004 mm
- ▲ tolerance: Ø 5,97 – 20,05 mm = +0,005 mm

UNI

KOMET \ Performance



DBG-U

51P.57

HA

Left Hand Helix

∢ 30°

ASG2210

Solid carbide

Through hole

DC +0,004/+0,005 mm	OAL mm	L mm	LU mm	DCONMS h6 mm	ZEFP	40 489 ...	PG U4 £	 £
3,97	50	12	24	4	4	03970	~~113.06~~	62.18
3,98	50	12	24	4	4	03980	~~113.06~~	62.18
3,99	50	12	24	4	4	03990	~~113.06~~	62.18
4,00	50	12	24	4	4	04000	~~113.06~~	62.18
4,01	50	12	24	4	4	04010	~~113.06~~	62.18
4,02	50	12	24	4	4	04020	~~113.06~~	62.18
4,03	50	12	24	4	4	04030	~~113.06~~	62.18
4,97	64	12	31	6	4	04970	~~115.47~~	63.51
4,98	64	12	31	6	4	04980	~~115.47~~	63.51
4,99	64	12	31	6	4	04990	~~115.47~~	63.51
5,00	64	12	31	6	4	05000	~~115.47~~	63.51
5,01	64	12	31	6	4	05010	~~115.47~~	63.51
5,02	64	12	31	6	4	05020	~~115.47~~	63.51
5,03	64	12	31	6	4	05030	~~115.47~~	63.51
5,97	64	12	31	6	4	05970	~~116.37~~	64.00
5,98	64	12	31	6	4	05980	~~116.37~~	64.00
5,99	64	12	31	6	4	05990	~~116.37~~	64.00
6,00	64	12	31	6	4	06000	~~116.37~~	64.00
6,01	64	12	31	6	4	06010	~~116.37~~	64.00
6,02	64	12	31	6	4	06020	~~116.37~~	64.00
6,03	64	12	31	6	4	06030	~~116.37~~	64.00
7,97	70	16	31	8	6	07970	~~121.98~~	67.09
7,98	70	16	31	8	6	07980	~~121.98~~	67.09
7,99	70	16	31	8	6	07990	~~121.98~~	67.09
8,00	70	16	31	8	6	08000	~~121.98~~	67.09
8,01	70	16	31	8	6	08010	~~121.98~~	67.09
8,02	70	16	31	8	6	08020	~~121.98~~	67.09
8,03	70	16	31	8	6	08030	~~121.98~~	67.09
9,97	80	16	35	10	6	09970	~~173.70~~	95.54
9,98	80	16	35	10	6	09980	~~173.70~~	95.54
9,99	80	16	35	10	6	09990	~~173.70~~	95.54
10,00	80	16	35	10	6	10000	~~173.70~~	95.54
10,01	80	16	35	10	6	10010	~~173.70~~	95.54
10,02	80	16	35	10	6	10020	~~173.70~~	95.54
10,03	80	16	35	10	6	10030	~~173.70~~	95.54
11,97	90	20	40	12	6	11970	~~231.03~~	127.07
11,98	90	20	40	12	6	11980	~~231.03~~	127.07
11,99	90	20	40	12	6	11990	~~231.03~~	127.07
12,00	90	20	40	12	6	12000	~~231.03~~	127.07
12,01	90	20	40	12	6	12010	~~231.03~~	127.07
12,02	90	20	40	12	6	12020	~~231.03~~	127.07
12,03	90	20	40	12	6	12030	~~231.03~~	127.07

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Fullmax – High-performance machine reamers, short

- ▲ extremely irregular pitch
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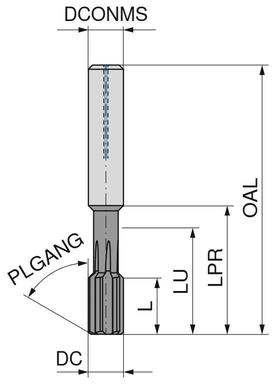
- ▲ specialised geometries and coatings
- ▲ tolerance: Ø 2,96 – 5,96 mm = +0,004 mm
- ▲ tolerance: Ø 5,97 – 20,05 mm = +0,005 mm

UNI

KOMET \ Performance



DBG-U

51M.57

HA

straight flute

∢ 60°

ASG2110

Solid carbide

Blind hole

DC +0,004/+0,005 mm	OAL mm	L mm	LU mm	DCONMS h6 mm	ZEFP	40 488 ...	PG U4 £	 £
3,97	50	12	24	4	4	03970	~~95.31~~	52.42
3,98	50	12	24	4	4	03980	~~95.31~~	52.42
3,99	50	12	24	4	4	03990	~~95.31~~	52.42
4,00	50	12	24	4	4	04000	~~95.31~~	52.42
4,01	50	12	24	4	4	04010	~~95.31~~	52.42
4,02	50	12	24	4	4	04020	~~95.31~~	52.42
4,03	50	12	24	4	4	04030	~~95.31~~	52.42
4,97	64	12	31	6	4	04970	~~97.71~~	53.74
4,98	64	12	31	6	4	04980	~~97.71~~	53.74
4,99	64	12	31	6	4	04990	~~97.71~~	53.74
5,00	64	12	31	6	4	05000	~~97.71~~	53.74
5,01	64	12	31	6	4	05010	~~97.71~~	53.74
5,02	64	12	31	6	4	05020	~~97.71~~	53.74
5,03	64	12	31	6	4	05030	~~97.71~~	53.74
5,97	64	12	31	6	4	05970	~~99.35~~	54.64
5,98	64	12	31	6	4	05980	~~99.35~~	54.64
5,99	64	12	31	6	4	05990	~~99.35~~	54.64
6,00	64	12	31	6	4	06000	~~99.35~~	54.64
6,01	64	12	31	6	4	06010	~~99.35~~	54.64
6,02	64	12	31	6	4	06020	~~99.35~~	54.64
6,03	64	12	31	6	4	06030	~~99.35~~	54.64
7,97	70	16	31	8	6	07970	~~104.24~~	57.33
7,98	70	16	31	8	6	07980	~~104.24~~	57.33
7,99	70	16	31	8	6	07990	~~104.24~~	57.33
8,00	70	16	31	8	6	08000	~~104.24~~	57.33
8,01	70	16	31	8	6	08010	~~104.24~~	57.33
8,02	70	16	31	8	6	08020	~~104.24~~	57.33
8,03	70	16	31	8	6	08030	~~104.24~~	57.33
9,97	80	16	35	10	6	09970	~~151.85~~	83.52
9,98	80	16	35	10	6	09980	~~151.85~~	83.52
9,99	80	16	35	10	6	09990	~~151.85~~	83.52
10,00	80	16	35	10	6	10000	~~151.85~~	83.52
10,01	80	16	35	10	6	10010	~~151.85~~	83.52
10,02	80	16	35	10	6	10020	~~151.85~~	83.52
10,03	80	16	35	10	6	10030	~~151.85~~	83.52
11,97	90	20	40	12	6	11970	~~202.77~~	111.52
11,98	90	20	40	12	6	11980	~~202.77~~	111.52
11,99	90	20	40	12	6	11990	~~202.77~~	111.52
12,00	90	20	40	12	6	12000	~~202.77~~	111.52
12,01	90	20	40	12	6	12010	~~202.77~~	111.52
12,02	90	20	40	12	6	12020	~~202.77~~	111.52
12,03	90	20	40	12	6	12030	~~202.77~~	111.52

P	●
M	●
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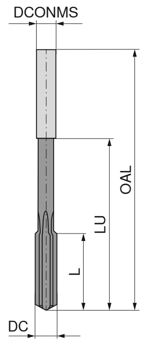
O	

Machine reamers, similar to DIN 8093-A / -B

▲ extremely irregular pitch

N



Left Hand Helix
Solid carbide

straight flute
Solid carbide

DC H7	OAL	L	LU	DCONMS h7	ZEFP	40 410 ...		PG U4	40 400 ...		PG U4
mm	mm	mm	mm	mm			£	£		£	£
2.0	49	11	31	2.0	4	020	~~30.48~~	16.76	020	~~30.48~~	16.76
2.1	49	11	31	2.0	4	021	~~36.62~~	20.14	021	~~36.62~~	20.14
2.2	53	12	35	2.2	4	022	~~36.62~~	20.14	022	~~36.62~~	20.14
2.3	53	12	35	2.2	4	023	~~36.62~~	20.14	023	~~36.62~~	20.14
2.4	57	14	34	2.5	4	024	~~36.62~~	20.14	024	~~36.62~~	20.14
2.5	57	14	34	2.5	4	025	~~32.69~~	17.98	025	~~32.69~~	17.98
2.6	57	14	34	2.5	4	026	~~39.23~~	21.58	026	~~39.23~~	21.58
2.7	61	15	36	3.0	4	027	~~39.23~~	21.58	027	~~39.23~~	21.58
2.8	61	15	36	3.0	4	028	~~39.23~~	21.58	028	~~39.23~~	21.58
2.9	61	15	36	3.0	4	029	~~39.23~~	21.58	029	~~39.23~~	21.58
3.0	61	15	36	3.0	4	030	~~35.11~~	19.31	030	~~35.11~~	19.31
3.1	61	15	36	3.0	4	031	~~42.20~~	23.21	031	~~42.20~~	23.21
3.2	70	18	40	3.5	4	032	~~42.20~~	23.21	032	~~42.20~~	23.21
3.3	70	18	40	3.5	4	033	~~42.20~~	23.21	033	~~42.20~~	23.21
3.4	70	18	40	3.5	4	034	~~42.20~~	23.21	034	~~42.20~~	23.21
3.5	70	18	40	3.5	4	035	~~40.17~~	22.09	035	~~40.17~~	22.09
3.6	70	18	40	3.5	4	036	~~48.18~~	26.50	036	~~48.18~~	26.50
3.7	70	18	40	3.5	4	037	~~48.18~~	26.50	037	~~48.18~~	26.50
3.8	75	19	43	4.0	4	038	~~48.18~~	26.50	038	~~48.18~~	26.50
3.9	75	19	43	4.0	4	039	~~48.18~~	26.50	039	~~48.18~~	26.50
4.0	75	19	43	4.0	4	040	~~43.22~~	23.77	040	~~43.22~~	23.77
4.1	75	19	43	4.0	4	041	~~51.83~~	28.51	041	~~51.83~~	28.51
4.2	75	19	43	4.0	4	042	~~51.83~~	28.51	042	~~51.83~~	28.51
4.3	75	21	42	4.5	4	043	~~51.83~~	28.51	043	~~51.83~~	28.51
4.4	75	21	42	4.5	4	044	~~51.83~~	28.51	044	~~51.83~~	28.51
4.5	75	21	42	4.5	4	045	~~46.99~~	25.84	045	~~46.99~~	25.84
4.6	75	21	42	4.5	4	046	~~56.40~~	31.02	046	~~56.40~~	31.02
4.7	75	21	42	4.5	4	047	~~56.40~~	31.02	047	~~56.40~~	31.02
4.8	86	23	52	5.0	4	048	~~56.40~~	31.02	048	~~56.40~~	31.02
4.9	86	23	52	5.0	4	049	~~56.40~~	31.02	049	~~56.40~~	31.02
5.0	86	23	52	5.0	4	050	~~53.09~~	29.20	050	~~53.09~~	29.20
5.1	86	23	52	5.0	4	051	~~61.09~~	33.60	051	~~61.09~~	33.60
5.2	86	23	52	5.0	4	052	~~61.09~~	33.60	052	~~61.09~~	33.60
5.3	86	23	52	5.0	6	053	~~61.09~~	33.60	053	~~61.09~~	33.60
5.4	93	26	57	5.6	6	054	~~61.09~~	33.60	054	~~61.09~~	33.60
5.5	93	26	57	5.6	6	055	~~56.20~~	30.91	055	~~56.20~~	30.91
5.6	93	26	57	5.6	6	056	~~64.56~~	35.51	056	~~64.56~~	35.51
5.7	93	26	57	5.6	6	057	~~64.56~~	35.51	057	~~64.56~~	35.51
5.8	93	26	57	5.6	6	058	~~64.56~~	35.51	058	~~64.56~~	35.51
5.9	93	26	57	5.6	6	059	~~64.56~~	35.51	059	~~64.56~~	35.51
6.0	93	26	57	5.6	6	060	~~67.22~~	36.97	060	~~67.22~~	36.97
6.1	93	26	57	5.6	6	061	~~77.26~~	42.49	061	~~77.26~~	42.49
6.2	93	26	57	5.6	6	062	~~77.26~~	42.49	062	~~77.26~~	42.49
6.3	101	28	63	6.3	6	063	~~77.26~~	42.49	063	~~77.26~~	42.49
6.4	101	28	63	6.3	6	064	~~77.26~~	42.49	064	~~77.26~~	42.49
6.5	101	28	63	6.3	6	065	~~75.45~~	41.50	065	~~75.45~~	41.50
6.6	101	28	63	6.3	6	066	~~86.75~~	47.71	066	~~86.75~~	47.71
6.7	101	28	63	6.3	6	067	~~86.75~~	47.71	067	~~86.75~~	47.71
6.8	109	31	69	7.1	6	068	~~86.75~~	47.71	068	~~86.75~~	47.71
6.9	109	31	69	7.1	6	069	~~86.75~~	47.71	069	~~86.75~~	47.71
7.0	109	31	69	7.1	6	070	~~84.23~~	46.33	070	~~84.23~~	46.33
7.1	109	31	69	7.1	6	071	~~96.87~~	53.28	071	~~96.87~~	53.28
7.2	109	31	69	7.1	6	072	~~96.87~~	53.28	072	~~96.87~~	53.28
7.3	109	31	69	7.1	6	073	~~96.87~~	53.28	073	~~96.87~~	53.28
7.4	109	31	69	7.1	6	074	~~96.87~~	53.28	074	~~96.87~~	53.28
7.5	109	31	69	7.1	6	075	~~91.06~~	50.08	075	~~91.06~~	50.08
7.6	117	33	75	8.0	6	076	~~104.69~~	57.58	076	~~104.69~~	57.58
7.7	117	33	75	8.0	6	077	~~104.69~~	57.58	077	~~104.69~~	57.58
7.8	117	33	75	8.0	6	078	~~104.69~~	57.58	078	~~104.69~~	57.58
7.9	117	33	75	8.0	6	079	~~104.69~~	57.58	079	~~104.69~~	57.58
8.0	117	33	75	8.0	6	080	~~96.94~~	53.32	080	~~96.94~~	53.32
8.1	117	33	75	8.0	6	081	~~106.65~~	58.66	081	~~106.65~~	58.66
8.2	117	33	75	8.0	6	082	~~106.65~~	58.66	082	~~106.65~~	58.66
8.3	117	33	75	8.0	6	083	~~106.65~~	58.66	083	~~106.65~~	58.66
8.4	117	33	75	8.0	6	084	~~106.65~~	58.66	084	~~106.65~~	58.66
8.5	117	33	75	8.0	6	085	~~105.12~~	57.82	085	~~105.12~~	57.82
8.6	125	36	81	9.0	6	086	~~115.59~~	63.57	086	~~115.59~~	63.57
8.7	125	36	81	9.0	6	087	~~115.59~~	63.57	087	~~115.59~~	63.57
8.8	125	36	81	9.0	6	088	~~115.59~~	63.57	088	~~115.59~~	63.57
8.9	125	36	81	9.0	6	089	~~115.59~~	63.57	089	~~115.59~~	63.57
9.0	125	36	81	9.0	6	090	~~112.71~~	61.99	090	~~112.71~~	61.99
9.1	125	36	81	9.0	6	091	~~123.93~~	68.16	091	~~123.93~~	68.16
9.2	125	36	81	9.0	6	092	~~123.93~~	68.16	092	~~123.93~~	68.16
9.3	125	36	81	9.0	6	093	~~123.93~~	68.16	093	~~123.93~~	68.16
9.4	125	36	81	9.0	6	094	~~123.93~~	68.16	094	~~123.93~~	68.16
9.5	125	36	81	9.0	6	095	~~120.86~~	66.47	095	~~120.86~~	66.47
9.6	133	38	87	10.0	6	096	~~132.93~~	73.11	096	~~132.93~~	73.11
9.7	133	38	87	10.0	6	097	~~132.93~~	73.11	097	~~132.93~~	73.11
9.8	133	38	87	10.0	6	098	~~132.93~~	73.11	098	~~132.93~~	73.11
9.9	133	38	87	10.0	6	099	~~132.93~~	73.11	099	~~132.93~~	73.11
10.0	133	38	87	10.0	6	100	~~130.05~~	71.53	100	~~130.05~~	71.53
10.1	133	38	87	10.0	6	101	~~143.06~~	78.68	101	~~143.06~~	78.68
10.2	133	38	87	10.0	6	102	~~143.06~~	78.68	102	~~143.06~~	78.68
10.3	133	38	87	10.0	6	103	~~143.06~~	78.68	103	~~143.06~~	78.68
10.4	133	38	87	10.0	6	104	~~143.06~~	78.68	104	~~143.06~~	78.68
10.5	133	38	87	10.0	6	105	~~135.92~~	74.76	105	~~135.92~~	74.76
10.6	133	38	87	10.0	6	106	~~149.54~~	82.25	106	~~149.54~~	82.25
10.7	142	41	96	10.0	6	107	~~149.54~~	82.25	107	~~149.54~~	82.25
10.8	142	41	96	10.0	6	108	~~149.54~~	82.25	108	~~149.54~~	82.25
10.9	142	41	96	10.0	6	109	~~149.54~~	82.25	109	~~149.54~~	82.25
11.0	142	41		10.0	6	110	~~147.32~~	81.03	110	~~147.32~~	81.03
11.1	142	41		10.0	6	111	~~162.04~~	89.12	111	~~162.04~~	89.12
11.2	142	41		10.0	6	112	~~162.04~~	89.12	112	~~162.04~~	89.12
11.3	142	41		10.0	6	113	~~162.04~~	89.12	113	~~162.04~~	89.12
11.4	142	41		10.0	6	114	~~162.04~~	89.12	114	~~162.04~~	89.12
11.5	142	41		10.0	6	115	~~156.27~~	85.95	115	~~156.27~~	85.95
11.6	142	41		10.0	6	116	~~171.98~~	94.59	116	~~171.98~~	94.59
11.7	142	41		10.0	6	117	~~171.98~~	94.59	117	~~171.98~~	94.59
11.8	142	41		10.0	6	118	~~171.98~~	94.59	118	~~171.98~~	94.59
11.9	151	44		10.0	6	119	~~171.98~~	94.59	119	~~171.98~~	94.59
12.0	151	44		10.0	6	120	~~169.40~~	93.17	120	~~169.40~~	93.17

	40 410 ...	40 400 ...
P	●	●
M	○	○
K	○	○
N	●	●
S	○	○
H		
O		

HSS TAPS

UNI – universal taps for all standard materials.

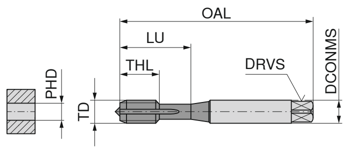
VA – problem solver for stainless and difficult to machine materials.

Roll tapping – 23-810 range. For all suitable applications and materials.

Through hole – Machine taps, right hand

M

WNT \ Standard



UNI | ISO 2 6H | B 4–5 | TiN

POWDERSTEEL
HSS-PM
◁ 0°
≤ 1000 N/mm²
≤ 3xD

VA | ISO 2 6H | B 4–5 | nitr.

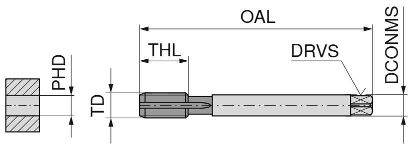
POWDERSTEEL
HSS-PM
◁ 0°
≤ 1200 N/mm²
≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	23 010 ... PG T9	£	£	23 450 ... PG T9	£	£
M2	0.40	45	2.8	2.1	1.6	4	13.5	2	**020**	~~10.12~~	8.60			
M3	0.50	56	3.5	2.7	2.5	11	18.0	3	**030**	~~12.72~~	10.81	**030**	~~11.85~~	10.07
M4	0.70	63	4.5	3.4	3.3	13	21.0	3	**040**	~~11.60~~	9.86	**040**	~~11.96~~	10.17
M5	0.80	70	6.0	4.9	4.2	15	25.0	3	**050**	~~12.97~~	11.02	**050**	~~12.97~~	11.02
M6	1.00	80	6.0	4.9	5.0	17	30.0	3	**060**	~~15.55~~	13.22	**060**	~~13.07~~	11.11
M8	1.25	90	8.0	6.2	6.8	20	35.0	3	**080**	~~17.26~~	14.67	**080**	~~14.69~~	12.49
M10	1.50	100	10.0	8.0	8.5	22	39.0	3	**100**	~~22.83~~	19.41	**100**	~~16.66~~	14.16

Through hole – Machine taps, right hand

M

WNT \ Standard



UNI | ISO 2 6H | B 4–5 | TiN

POWDERSTEEL
HSS-PM
◁ 0°
≤ 1000 N/mm²
≤ 3xD

VA | ISO 2 6H | B 4–5 | nitr.

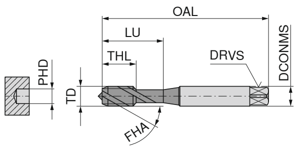
POWDERSTEEL
HSS-PM
◁ 0°
≤ 1200 N/mm²
≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	23 021 ... PG T9	£	£	23 451 ... PG T9	£	£
M12	1.75	110	9	7	10.2	24	3	**120**	~~27.27~~	23.18	**120**	~~29.74~~	25.28
M14	2.00	110	11	9	12.0	26	3				**140**	~~39.36~~	33.46
M14	2.00	110	11	9	12.0	20	4	**140**	~~41.33~~	35.13			
M16	2.00	110	12	9	14.0	27	3	**160**	~~38.38~~	32.62	**160**	~~41.59~~	35.35
M18	2.50	125	14	11	15.5	25	4	**180**	~~67.24~~	57.15			
M20	2.50	140	16	12	17.5	32	3	**200**	~~69.47~~	59.05	**200**	~~62.18~~	52.85

Blind hole – Machine taps, right hand

M

WNT \ Standard



UNI | ISO 2 6H | C 2–3 | TiN

HSS-PM
◁ 50°
≤ 1000 N/mm²
≤ 2,5xD

VA | ISO 2 6H | C 2–3 | TiN

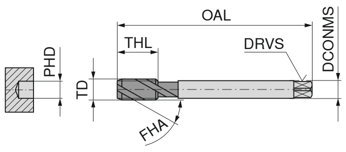
HSS-PM
◁ 40°
≤ 1200 N/mm²
≤ 2,5xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	Flutes	23 026 ... PG T9	£	£	23 456 ... PG T9	£	£
M3	0.50	56	3.5	2.7	2.5	6	18	3	**030**	~~14.43~~	12.27	**030**	~~14.43~~	12.27
M4	0.70	63	4.5	3.4	3.3	7	21	3	**040**	~~14.43~~	12.27	**040**	~~15.80~~	13.43
M5	0.80	70	6.0	4.9	4.2	8	25	3	**050**	~~15.55~~	13.22	**050**	~~16.04~~	13.63
M6	1.00	80	6.0	4.9	5.0	10	30	3	**060**	~~18.01~~	15.31	**060**	~~20.60~~	17.51
M8	1.25	90	8.0	6.2	6.8	14	35	3	**080**	~~21.36~~	18.16	**080**	~~22.09~~	18.78
M10	1.50	100	10.0	8.0	8.5	16	39	3	**100**	~~26.90~~	22.87	**100**	~~30.47~~	25.90

Blind hole – Machine taps, right hand

M

WNT \ Standard



UNI | ISO 2 6H | C 2–3 | TiN

HSS-PM
◁ 50°
≤ 1000 N/mm²
≤ 2,5xD

VA | ISO 2 6H | C 2–3 | TiN

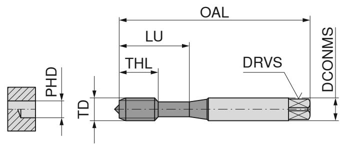
HSS-PM
◁ 40°
≤ 1200 N/mm²
≤ 2,5xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	Flutes	23 027 ... PG T9	£	£	23 457 ... PG T9	£	£
M12	1.75	110	9	7	10.2	18	4	**120**	~~31.83~~	27.06			
M12	1.75	110	9	7	10.2	18	3				**120**	~~43.68~~	37.13
M14	2.00	110	11	9	12.0	20	4	**140**	~~45.78~~	38.91			
M16	2.00	110	12	9	14.0	22	4	**160**	~~45.78~~	38.91			
M16	2.00	110	12	9	14.0	22	3				**160**	~~54.90~~	46.67
M20	2.50	140	16	12	17.5	25	3	**200**	~~52.45~~	44.58	**200**	~~109.06~~	92.70

Machine thread formers

M

WNT \ Standard

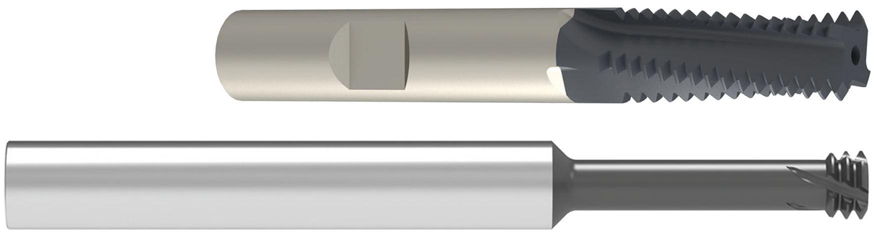


UNI | ISO 2X 6HX | C 2–3 | TiN

POWDERSTEEL
HSS-E
◁ 0°
≤ 850 N/mm²
≤ 3xD

TD mm	TP mm	OAL mm	DCONMS mm	DRVS mm	PHD mm	THL mm	LU mm	23 810 ... PG T9	£	£
M2	0.40	45	2.8	2.1	1.85	7	12	**020**	~~43.72~~	37.16
M2,5	0.45	50	2.8	2.1	2.33	9	14	**025**	~~38.94~~	33.10
M3	0.50	56	3.5	2.7	2.80	11	18	**030**	~~28.35~~	24.10
M4	0.70	63	4.5	3.4	3.70	13	21	**040**	~~28.75~~	24.44
M5	0.80	70	6.0	4.9	4.65	15	25	**050**	~~30.82~~	26.20
M6	1.00	80	6.0	4.9	5.60	17	30	**060**	~~37.00~~	31.45
M8	1.25	90	8.0	6.2	7.45	20	35	**080**	~~41.32~~	35.12
M10	1.50	100	10.0	8.0	9.35	22	39	**100**	~~55.10~~	46.84

THREAD MILLING CUTTERS



SGF

- universal application for all materials
- 2xD
- 3xD and 4xD
- metric fine version available in 2xD

Thread milling cutter

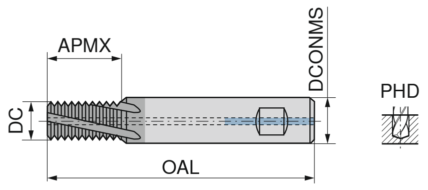
- ▲ Profile corrected
- ▲ Hard machining to Ø DC = 4 mm possible

SGF IR/IL

≤ 2xD

60°

M



TCS

Ti500

WNT \ Standard

HB

Solid carbide

DC mm	Thread	TP mm	APMX mm	DCONMS h6 mm	OAL mm	ZEFP	PHD mm	54 800 ...	PG W8 £	£
2.40	M3	0.50	6.5	4	42	2	2.50	**030** 1)	~~99.16~~	96.20
3.15	M4	0.70	9.0	6	55	3	3.30	**040** 2)	~~99.16~~	96.20
4.00	M5	0.80	11.0	6	55	3	4.20	**050** 2)	~~99.16~~	96.20
4.80	M6	1.00	13.0	6	55	3	5.00	**060** 2)	~~99.16~~	96.20
6.00	M8	1.25	18.0	6	60	3	6.75	**080**	~~104.10~~	101.00
8.00	M10	1.50	21.0	8	70	3	8.50	**100**	~~125.86~~	122.10
9.90	M12	1.75	26.0	10	75	4	10.25	**120**	~~152.17~~	147.60
11.60	M14	2.00	30.0	12	85	4	12.00	**140**	~~176.19~~	170.90
12.00	M16	2.00	34.0	12	85	4	14.00	**160**	~~184.19~~	178.70
14.00	M18	2.50	40.0	14	90	4	15.50	**180**	~~218.13~~	211.60
16.00	M20	2.50	42.0	16	90	4	17.50	**200**	~~226.52~~	219.70

P	●
M	●
K	●
N	●
S	●
H	●
O	●

1) DIN 6535 HA Shank / Without Through Coolant

2) Without Through Coolant

Thread milling cutter

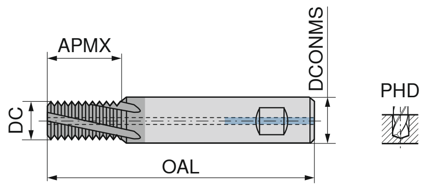
- ▲ Profile corrected
- ▲ Hard machining to Ø DC = 4 mm possible

SGF IR/IL

≤ 2xD

60°

MF



Ti500

WNT \ Standard

HB

Solid carbide

DC mm	Thread	TP mm	APMX mm	DCONMS h6 mm	OAL mm	ZEFP	PHD mm	54 802 ...	PG W8 £	£
4.0	M5	0.50	11	6	55	3	4.50	**050** 1)	~~99.16~~	96.20
4.8	M6	0.75	13	6	55	3	5.25	**060** 1)	~~99.16~~	96.20
6.0	M8	1.00	18	6	60	3	7.00	**080**	~~104.10~~	101.00
8.0	M10	1.25	21	8	70	3	8.75	**100**	~~125.86~~	122.10
9.9	M12	1.50	26	10	75	4	10.50	**122**	~~152.17~~	147.60
9.9	M12	1.00	26	10	75	4	11.00	**120**	~~152.17~~	147.60
9.9	M12	1.25	26	10	75	4	10.75	**121**	~~152.17~~	147.60
11.6	M14	1.50	30	12	85	4	12.50	**141**	~~176.19~~	170.90
11.6	M14	1.00	30	12	85	4	13.00	**140**	~~176.19~~	170.90
12.0	M16	1.50	34	12	85	4	14.50	**160**	~~184.19~~	178.70
14.0	M18	1.50	40	14	90	4	16.50	**180**	~~218.13~~	211.60
16.0	M20	1.50	42	16	90	4	18.50	**200**	~~226.52~~	219.70

P	●
M	●
K	●
N	●
S	●
H	●
O	●

1) DIN 6535 HA Shank / Without Through Coolant

Please Note: G, UNF, UNC, NPT, BSF, BSW, Pg, Tr and UN also available in the main catalogue.

Circular shank thread milling cutter

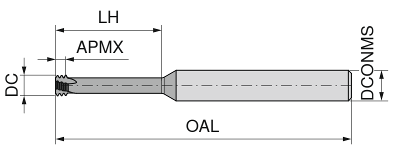
- ▲ Available on request from M1
- ▲ Profile corrected

SGF IR/IL

≤ 3xD

60°

M



Ti600

WNT \ Performance

HA

Solid carbide

DC mm	Thread	TP mm	OAL mm	APMX mm	LH mm	DCONMS h6 mm	ZEFP	50 802 ...	PG W1 £	£
1.53	M2	0.40	39	0.80	6.0	3	3	**02000**	~~80.23~~	77.80
2.37	M3	0.50	58	1.35	9.5	6	3	**03000**	~~80.23~~	77.80
3.10	M4	0.70	58	1.95	12.5	6	3	**04000**	~~80.23~~	77.80
3.80	M5	0.80	58	2.30	16.0	6	3	**05000**	~~80.23~~	77.80
4.65	M6	1.00	58	2.70	20.0	6	3	**06000**	~~80.23~~	77.80
6.00	M8	1.25	58	3.20	24.0	6	3	**08000**	~~80.23~~	77.80
7.80	M10	1.50	64	3.80	31.5	8	3	**10000**	~~99.97~~	97.00
9.00	M12	1.75	73	4.55	37.8	10	3	**12000**	~~112.38~~	109.00

≤ 4xD

60°

M

HA

Solid carbide

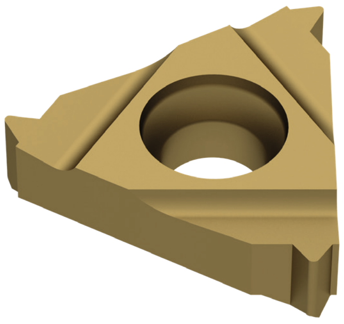
DC mm	Thread	TP mm	OAL mm	APMX mm	LH mm	DCONMS h6 mm	ZEFP	50 803 ...	PG W1 £	£
1.53	M2	0.40	39	1.00	10.4	3	3	**02000**	~~90.30~~	87.60
2.40	M3	0.50	39	1.30	12.5	3	3	**03000**	~~86.28~~	83.70
3.10	M4	0.70	58	1.80	16.7	6	3	**04000**	~~86.28~~	83.70
4.00	M5	0.80	58	2.10	20.8	6	3	**05000**	~~86.28~~	83.70
4.80	M6	1.00	58	2.55	25.0	6	3	**06000**	~~86.28~~	83.70
6.40	M8	1.25	64	3.15	33.5	8	3	**08000**	~~106.95~~	103.70
8.00	M10	1.50	76	3.85	41.5	8	3	**10000**	~~106.95~~	103.70

P	●
M	●
K	●
N	●
S	●
H	
O	●

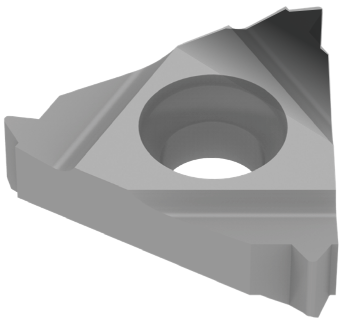
Our recycling service

Our joint contribution for the good of the environment: we take back your carbide and process it appropriately. You receive a credit from us that you can redeem with your next tool purchase.

THREAD TURNING



CWN1525 – for small batch and manual machining in all materials.



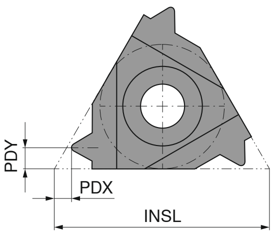
HCN2525 – for high performance and volume production in all materials.

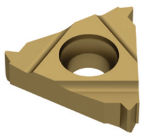
Right hand external thread turning insert

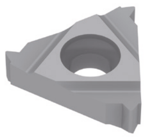
- ▲ Full profile
- ▲ CCN7525 grade with sintered chip breaker for universal application

M MF 60° CWN1525 TCS HCN2525

WNT \ Performance







Designation	TP mm	INSL mm	PDX mm	PDY mm	ER 71 220 ...	PG X3 £	£	ER 71 220 ...	PG X3 £	£
16 ER 0,35	0.35	16	0.8	0.4				**734**	~~24.05~~	16.84
16 ER 0,4	0.40	16	0.7	0.4				**736**	~~24.05~~	16.84
16 ER 0,5	0.50	16	0.6	0.6	**140**	~~16.51~~	11.56	**740**	~~18.73~~	13.11
16 ER 0,7	0.70	16	0.6	0.6	**141**	~~18.27~~	12.79	**741**	~~19.34~~	13.54
16 ER 0,75	0.75	16	0.6	0.6	**142**	~~17.16~~	12.01	**742**	~~18.73~~	13.11
16 ER 0,8	0.80	16	0.6	0.6	**143**	~~17.16~~	12.01	**743**	~~18.73~~	13.11
16 ER 1,0	1.00	16	0.7	0.7	**144**	~~16.02~~	11.21	**744**	~~18.27~~	12.79
16 ER 1,25	1.25	16	0.8	0.9	**146**	~~16.02~~	11.21	**746**	~~18.27~~	12.79
16 ER 1,5	1.50	16	0.8	1.0	**148**	~~16.02~~	11.21	**748**	~~18.27~~	12.79
16 ER 1,75	1.75	16	0.9	1.2	**150**	~~16.02~~	11.21	**750**	~~18.27~~	12.79
16 ER 2,0	2.00	16	1.0	1.3	**152**	~~16.02~~	11.21	**752**	~~18.27~~	12.79
16 ER 2,5	2.50	16	1.1	1.5	**154**	~~16.02~~	11.21	**754**	~~18.27~~	12.79
16 ER 3,0	3.00	16	1.2	1.6	**156**	~~16.02~~	11.21	**756**	~~18.27~~	12.79

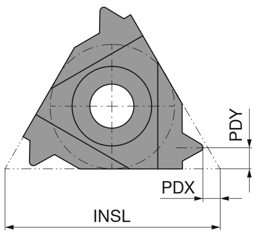
	71 220 ... (140–156)	71 220 ... (734–756)
P	●	○
M	○	●
K	●	○
N	●	○
S		○
H		○
O	○	

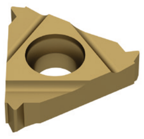
Right hand internal thread turning insert

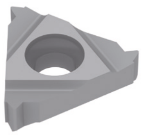
- ▲ Full profile
- ▲ CCN7525 grade with sintered chip breaker for universal application

M MF 60° CWN1525 TCS HCN2525

WNT \ Performance







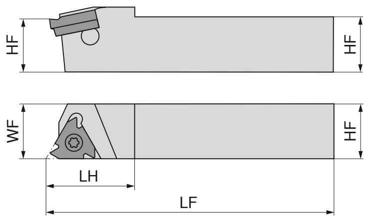
Designation	TP mm	INSL mm	PDX mm	PDY mm	IR 71 224 ...	PG X3 £	£	IR 71 224 ...	PG X3 £	£
16 IR 0,75	0.75	16	0.6	0.6	**142**	~~20.12~~	14.08	**742**	~~22.44~~	15.71
16 IR 1,0	1.00	16	0.6	0.7	**144**	~~16.02~~	11.21	**744**	~~18.27~~	12.79
16 IR 1,25	1.25	16	0.8	0.9				**746**	~~19.23~~	13.46
16 IR 1,5	1.50	16	0.8	1.0	**148**	~~16.02~~	11.21	**748**	~~18.27~~	12.79
16 IR 1,75	1.75	16	0.9	1.2				**750**	~~22.44~~	15.71
16 IR 2,0	2.00	16	1.0	1.3	**152**	~~16.02~~	11.21	**752**	~~18.27~~	12.79
16 IR 2,5	2.50	16	1.1	1.5	**154**	~~16.02~~	11.21	**754**	~~18.27~~	12.79
16 IR 3,0	3.00	16	1.1	1.5	**156**	~~16.02~~	11.21	**756**	~~18.27~~	12.79

	71 224 ... (142–156)	71 224 ... (742–756)
P	●	○
M	○	●
K	●	○
N	●	○
S		○
H		○
O	○	

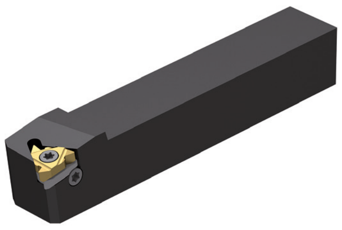
Standard External Thread Turning Holder

▲ Tool Holder with Approach Angle ß = 1,5°

WNT \ Performance



Illustrations show right-hand versions

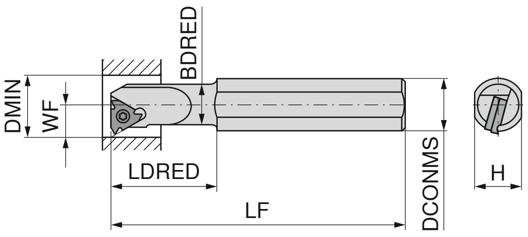


ISO designation	HF mm	WF mm	LF mm	LH mm	H mm	Insert	torque moment Nm	Right-hand 71 280 ...	PG Y2 £	£
SE R 12 12 F16	12	16	80	22	12	16 ..	3,5	**012**	~~117.68~~	47.00
SE R 16 16 H16	16	16	100	25	16	16 ..	3,5	**016**	~~144.86~~	58.00
SE R 20 20 K16	20	20	125	30	20	16 ..	3,5	**020**	~~144.86~~	58.00
SE R 25 25 M16	25	25	150	30	25	16 ..	3,5	**025**	~~165.32~~	66.00
SE R 32 32 P16	32	32	170	30	32	16 ..	3,5	**032**	~~181.69~~	73.00

Standard Internal Thread Turning Holder

▲ Tool Holder with Approach Angle ß = 1,5°

WNT \ Performance

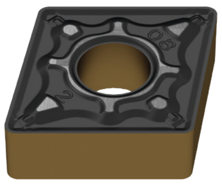


Illustrations show right-hand versions

ISO designation	H mm	LF mm	LDRED mm	DCONMS mm	BDRED mm	WF mm	DMIN mm	Insert	torque moment Nm	Left-hand 71 283 ...	PG Y2 £	£	Right-hand 71 282 ...	PG Y2 £	£
SI L 0013 M16	14.0	150	32	16	13.0	10.2	16	16 ..	3,5	**015** 1)	~~138.15~~	55.00			
SI L 0016 P16	18.0	170	40	20	15.0	11.7	19	16 ..	3,5	**016** 1)	~~138.15~~	55.00			
SI L 0020 P16	18.0	170	40	20	19.5	13.7	24	16 ..	3,5	**020**	~~162.87~~	65.00			
SI L 0032 S16	28.8	250	50	32	31.5	19.7	36	16 ..	3,5	**032**	~~212.78~~	85.00			
SI R 0013 M16	14.0	150	32	16	13.0	10.2	16	16 ..	3,5				**015** 1)	~~138.15~~	55.00
SI R 0016 P16	18.0	170	40	20	15.0	11.7	19	16 ..	3,5				**016** 1)	~~138.15~~	55.00
SI R 0020 P16	18.0	170	40	20	19.5	13.7	24	16 ..	3,5				**020**	~~162.87~~	65.00
SI R 0025 R16	22.6	200	40	25	24.5	16.2	29	16 ..	3,5				**026**	~~198.05~~	79.00
SI R 0032 S16	28.8	250	50	32	31.5	19.7	36	16 ..	3,5				**032**	~~212.78~~	85.00
SI R 0040 T16	36.0	300	50	40	39.5	23.7	44	16 ..	3,5				**040**	~~315.90~~	126.00

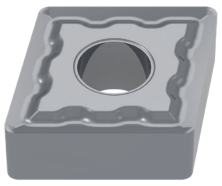
1) without shim

TURNING



CTCP115 / CTCP125 / CTCP135 – P
high performance turning of steels with
wear detection feature.

CTCM120 / CTCM130 –
high performance turning of
stainless steels.



CTPX710 / CTPX715 –
high performance universal grade
on difficult to machine materials.

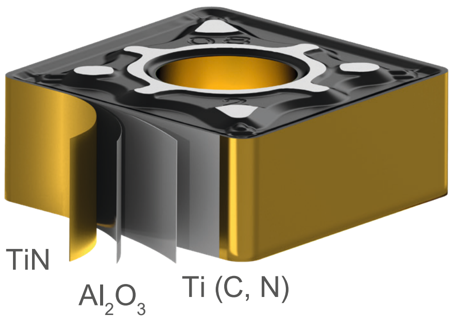
Steel machining made easy

The new ISO-P grades with indicator layer for high-performance turning processes!

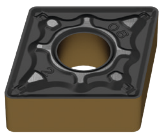
CUTTING SOLUTIONS BY CERATIZIT

Machining with no compromises – with the CERATIZIT ISO-P carbide grades update

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

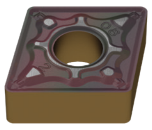


CTCP115-P

- ▲ ISO-P15
- ▲ Wear-resistant grade with high degree of elevated-temperature resistance for steel machining with optimum tool life
- ▲ High cutting speeds
- ▲ Maximum productivity
- ▲ For a smooth cut

DRAGONSKIN

NEW

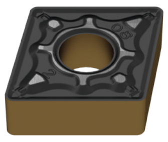


CTCP135-P

- ▲ ISO-P35
- ▲ Tough carbide grade for interrupted cuts
- ▲ Guaranteed process security
- ▲ For low cutting speeds and unstable conditions

DRAGONSKIN

NEW



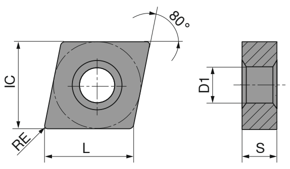
CTCP125-P

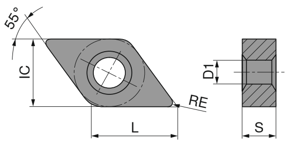
- ▲ ISO-P25
- ▲ Universal carbide grade for steel machining
- ▲ Excellent balance between toughness and elevated-temperature resistance
- ▲ High level of reliability for machining general steel
- ▲ Excellent for fluctuating cutting conditions, from finishing to roughing

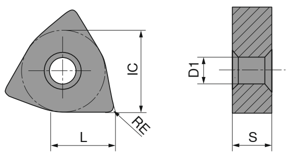
DRAGONSKIN

CNMG / DNMG / WNMG

Designation	L mm	S mm	D1 mm	IC mm
CNMG 1204..	12.9	4.76	5.16	12.70
CNMG 1606..	16.1	6.35	6.35	15.87
DNMG 1104..	11.6	4.76	3.81	9.52
DNMG 1504..	15.5	4.76	5.16	12.70
DNMG 1506..	15.5	6.35	5.16	12.70
WNMG 0604..	6.5	4.76	3.81	9.52
WNMG 0804..	8.6	4.76	5.16	12.70



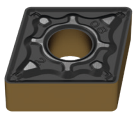
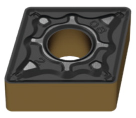
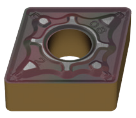




CNMG

CERATIZIT \ Performance

TCS

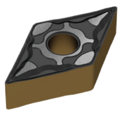
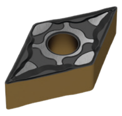
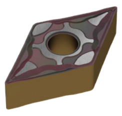




ISO	RE mm	-M50 CTCP115-P DRAGONSKIN M 76 135 ...	PG 1A/08 £	£	-M50 CTCP125-P DRAGONSKIN M 76 135 ...	PG 1A/08 £	£	-M50 CTCP135-P DRAGONSKIN M 76 135 ...	PG 1A/08 £	£
120404EN	0.4	32801	~~11.45~~	8.59	52801	~~11.45~~	8.59	72801	~~11.45~~	8.59
120408EN	0.8	33001	~~11.45~~	8.59	53001	~~11.45~~	8.59	73001	~~11.45~~	8.59
120412EN	1.2	32001	~~11.45~~	8.59	53201	~~11.45~~	8.59	73201	~~11.45~~	8.59
120416EN	1.6	33401	~~11.45~~	8.59	53401	~~11.45~~	8.59	73401	~~11.45~~	8.59
160608EN	0.8	34201	~~18.50~~	13.88	54201	~~18.50~~	13.88	74201	~~18.50~~	13.88
160612EN	1.2	34401	~~18.50~~	13.88	54401	~~18.50~~	13.88	74401	~~18.50~~	13.88
160616EN	1.6	34601	~~18.50~~	13.88	54601	~~18.50~~	13.88	74601	~~18.50~~	13.88
P		●			●			●		
M								○		
K		○			○					
N										
S										
H										
O										

DNMG

CERATIZIT \ Performance

TCS

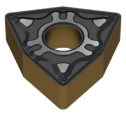
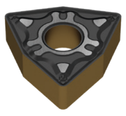
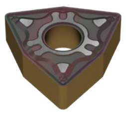




ISO	RE mm	-M50 CTCP115-P DRAGONSKIN M 76 136 ...	PG 1A/08 £	£	-M50 CTCP125-P DRAGONSKIN M 76 136 ...	PG 1A/08 £	£	-M50 CTCP135-P DRAGONSKIN M 76 136 ...	PG 1A/08 £	£
110404EN	0.4	30401	~~12.21~~	9.16	50401	~~12.21~~	9.16	70401	~~12.21~~	9.16
110408EN	0.8	30601	~~12.21~~	9.16	50601	~~12.21~~	9.16	70601	~~12.21~~	9.16
110412EN	1.2	30801	~~12.21~~	9.16	50801	~~12.21~~	9.16	70801	~~12.21~~	9.16
150404EN	0.4	31601	~~14.81~~	11.11	51401	~~14.81~~	11.11	71601	~~14.81~~	11.11
150408EN	0.8	31801	~~14.81~~	11.11	51801	~~14.81~~	11.11	71801	~~14.81~~	11.11
150412EN	1.2	32001	~~14.81~~	11.11	51601	~~14.81~~	11.11	72001	~~14.81~~	11.11
150416EN	1.6	32201	~~14.81~~	11.11	52201	~~14.81~~	11.11	72201	~~14.81~~	11.11
150604EN	0.4	32801	~~16.04~~	12.03	52801	~~16.04~~	12.03	72801	~~16.04~~	12.03
150608EN	0.8	33001	~~16.04~~	12.03	53001	~~16.04~~	12.03	73001	~~16.04~~	12.03
150612EN	1.2	33201	~~16.04~~	12.03	53201	~~16.04~~	12.03	73201	~~16.04~~	12.03
150616EN	1.6	33401	~~16.04~~	12.03	53401	~~16.04~~	12.03	73401	~~16.04~~	12.03
P		●			●			●		
M								○		
K		○			○					
N										
S										
H										
O										

WNMG

CERATIZIT \ Performance

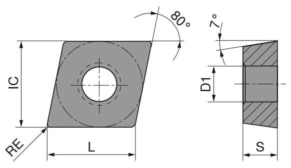
TCS

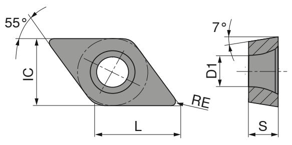




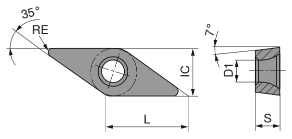
ISO	RE mm	-M50 CTCP115-P DRAGONSKIN M 76 139 ...	PG 1A/08 £	£	-M50 CTCP125-P DRAGONSKIN M 76 139 ...	PG 1A/08 £	£	-M50 CTCP135-P DRAGONSKIN M 76 139 ...	PG 1A/08 £	£
060404EN	0.4	30401	~~9.98~~	7.49	50401	~~9.98~~	7.49	70401	~~9.98~~	7.49
060408EN	0.8	30601	~~9.98~~	7.49	50601	~~9.98~~	7.49	70601	~~9.98~~	7.49
060412EN	1.2	30801	~~9.98~~	7.49	50801	~~9.98~~	7.49	70801	~~9.98~~	7.49
080404EN	0.4	31601	~~12.56~~	9.42	51601	~~12.56~~	9.42	71601	~~12.56~~	9.42
080408EN	0.8	31801	~~12.56~~	9.42	51801	~~12.56~~	9.42	71801	~~12.56~~	9.42
080412EN	1.2	32001	~~12.56~~	9.42	52001	~~12.56~~	9.42	72001	~~12.56~~	9.42
080416EN	1.6	32201	~~12.56~~	9.42	52201	~~12.56~~	9.42	72201	~~12.56~~	9.42
P		●			●			●		
M								○		
K		○			○					
N										
S										
H										
O										

CCMT / DCMT / VCMT

Designation	L mm	S mm	D1 mm	IC mm
CCMT 0602..	6.40	2.38	2.8	6.35
CCMT 09T3..	9.70	3.97	4.4	9.52
CCMT 1204..	12.90	4.76	5.5	12.70
DCMT 0702..	7.75	2.38	2.8	6.35
DCMT 11T3..	11.60	3.97	4.4	9.52
VCMT 1604..	16.60	4.76	4.4	9.52

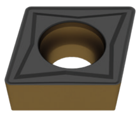
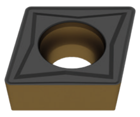
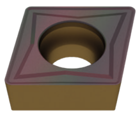






CCMT

CERATIZIT \ Performance

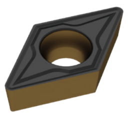
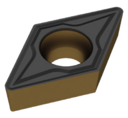
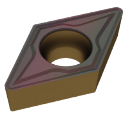




		-SM			-SM			-SM		
		CTCP115-P			CTCP125-P			CTCP135-P		
		DRAGONSKIN			DRAGONSKIN			DRAGONSKIN		
		M			M			M		
ISO	RE	76 252 ...	PG 1A/08		76 252 ...	PG 1A/08		76 252 ...	PG 1A/08	
	mm		£	£		£	£		£	£
060204EN	0.4	**30401**	~~7.79~~	5.84	**50401**	~~7.79~~	5.84	**70401**	~~7.79~~	5.84
060208EN	0.8	**30601**	~~7.79~~	5.84				**70601**	~~7.79~~	5.84
09T304EN	0.4	**31601**	~~9.72~~	7.29	**51601**	~~9.72~~	7.29	**71601**	~~9.72~~	7.29
09T308EN	0.8	**31801**	~~9.72~~	7.29	**51801**	~~9.72~~	7.29	**71801**	~~9.72~~	7.29
120404EN	0.4	**32801**	~~13.69~~	10.27	**52801**	~~13.69~~	10.27	**72801**	~~13.69~~	10.27
120408EN	0.8	**33001**	~~13.69~~	10.27	**53001**	~~13.69~~	10.27	**73001**	~~13.69~~	10.27
120412EN	1.2				**53201**	~~13.69~~	10.27			

	CTCP115-P	CTCP125-P	CTCP135-P
P	●	●	●
M			○
K	○	○	
N			
S			
H			
O			

DCMT

CERATIZIT \ Performance

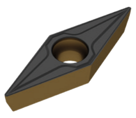
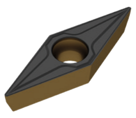
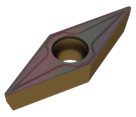




		-SM			-SM			-SM		
		CTCP115-P			CTCP125-P			CTCP135-P		
		DRAGONSKIN			DRAGONSKIN			DRAGONSKIN		
		M			M			M		
ISO	RE	76 258 ...	PG 1A/08		76 258 ...	PG 1A/08		76 258 ...	PG 1A/08	
	mm		£	£		£	£		£	£
070204EN	0.4	**30401**	~~7.79~~	5.84	**50401**	~~7.79~~	5.84	**70401**	~~7.79~~	5.84
070208EN	0.8	**30601**	~~7.79~~	5.84	**50601**	~~7.79~~	5.84	**70601**	~~7.79~~	5.84
11T304EN	0.4	**31601**	~~10.96~~	8.22	**51601**	~~10.96~~	8.22	**71601**	~~10.96~~	8.22
11T308EN	0.8	**31801**	~~10.96~~	8.22	**51801**	~~10.96~~	8.22	**71801**	~~10.96~~	8.22
11T312EN	1.2				**52001**	~~10.96~~	8.22			

	CTCP115-P	CTCP125-P	CTCP135-P
P	●	●	●
M			○
K	○	○	
N			
S			
H			
O			

VCMT

CERATIZIT \ Performance

		-SM			-SM			-SM		
		CTCP115-P			CTCP125-P			CTCP135-P		
		DRAGONSKIN			DRAGONSKIN			DRAGONSKIN		
		M			M			M		
ISO	RE	76 278 ...	PG 1A/08		76 278 ...	PG 1A/08		76 278 ...	PG 1A/08	
	mm		£	£		£	£		£	£
160404EN	0.4	**32801**	~~16.04~~	12.03	**52801**	~~16.04~~	12.03	**72801**	~~16.04~~	12.03
160406EN	0.6	**32901**	~~16.04~~	12.03						
160408EN	0.8	**33001**	~~16.04~~	12.03	**53001**	~~16.04~~	12.03	**73001**	~~16.04~~	12.03
160412EN	1.2	**33201**	~~16.04~~	12.03	**53201**	~~16.04~~	12.03	**73201**	~~16.04~~	12.03

	CTCP115-P	CTCP125-P	CTCP135-P
P	●	●	●
M			○
K	○	○	
N			
S			
H			
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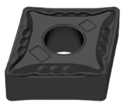
STAINLESS STEEL MACHINING MADE EASY

Dragonskin – new grades with the high-performance coating technology from CERATIZIT

Always the right solution for machining austenitic, stainless steels. In addition to the established CTPM125, two new grades now round off our product range: the more wear-resistant CTCM120 and the tougher CTCM130. Thanks to the Dragonskin coating, both grades are high performers and process-secure.

CTCM120

- ▲ Wear-resistant grade for austenitic steels
- ▲ High cutting speeds
- ▲ For a smooth cut

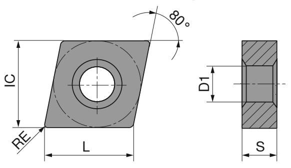


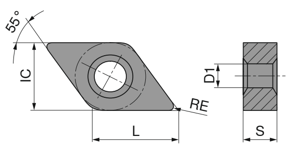
CTCM130

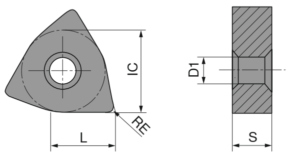
- ▲ Tough carbide grade for interrupted cuts
- ▲ Guaranteed process security
- ▲ For lower cutting speeds and unstable conditions

CNMG / DNMG / WNMG

Designation	L mm	S mm	D1 mm	IC mm
CNMG 1204..	12.9	4.76	5.16	12.70
DNMG 1104..	11.6	4.76	3.81	9.52
DNMG 1506..	15.5	6.35	5.16	12.70
WNMG 0604..	6.5	4.76	3.81	9.52
WNMG 0804..	8.6	4.76	5.16	12.70

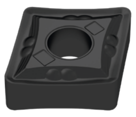


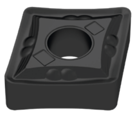




CNMG

CERATIZIT \ Performance



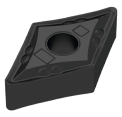


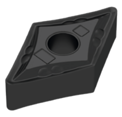
ISO	RE	TCS -M30 CTCM120 DRAGONSKIN M			TCS -M30 CTCM130 DRAGONSKIN M		
		75 011 ...	PG 1A/08		75 011 ...	PG 1A/08	
	mm		£	£		£	£
120408EN	0.8	**13000**	~~11.45~~	8.59	**33000**	~~11.45~~	8.59
120412EN	1.2	**13200**	~~11.45~~	8.59	**33200**	~~11.45~~	8.59
120416EN	1.6	**13400**	~~11.45~~	8.59	**33400**	~~11.45~~	8.59

	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

DNMG

CERATIZIT \ Performance



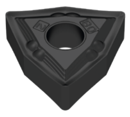


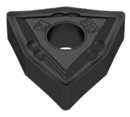
ISO	RE	TCS -M30 CTCM120 DRAGONSKIN M			TCS -M30 CTCM130 DRAGONSKIN M		
		75 014 ...	PG 1A/08		75 014 ...	PG 1A/08	
	mm		£	£		£	£
110408EN	0.8	**10600**	~~12.21~~	9.16	**30600**	~~12.21~~	9.16
110412EN	1.2	**10800**	~~12.21~~	9.16	**30800**	~~12.21~~	9.16
150608EN	0.8	**13000**	~~16.04~~	12.03	**33000**	~~16.04~~	12.03
150612EN	1.2	**13200**	~~16.04~~	12.03	**33200**	~~16.04~~	12.03

	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

WNMG

CERATIZIT \ Performance



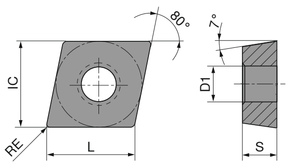


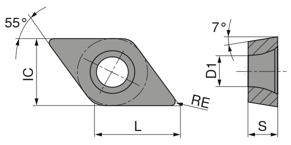
ISO	RE	TCS -M30 CTCM120 DRAGONSKIN M			TCS -M30 CTCM130 DRAGONSKIN M		
		75 025 ...	PG 1A/08		75 025 ...	PG 1A/08	
	mm		£	£		£	£
060408EN	0.8	**10600**	~~9.98~~	7.49	**30600**	~~9.98~~	7.49
060412EN	1.2	**10800**	~~9.98~~	7.49	**30800**	~~9.98~~	7.49
080408EN	0.8	**11800**	~~12.56~~	9.42	**31800**	~~12.56~~	9.42
080412EN	1.2	**12000**	~~12.56~~	9.42	**32000**	~~12.56~~	9.42

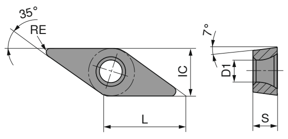
	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

CCMT / DCMT / VCMT

Designation	L mm	S mm	D1 mm	IC mm
CCMT 0602..	6.40	2.38	2.8	6.35
CCMT 09T3..	9.70	3.97	4.4	9.52
DCMT 0702..	7.75	2.38	2.8	6.35
DCMT 11T3..	11.60	3.97	4.4	9.52
VCMT 1604..	16.60	4.76	4.4	9.52

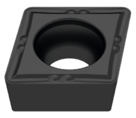


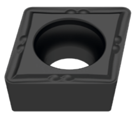




CCMT

CERATIZIT \ Performance



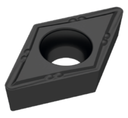


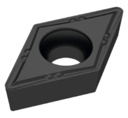
ISO	RE	TCS -M25 CTCM120 DRAGONSKIN F 75 210 ...	PG 1A/08		TCS -M25 CTCM130 DRAGONSKIN F 75 210 ...	PG 1A/08	
	mm		£	£		£	£
060204EN	0.4	**10400**	~~7.79~~	5.84	**30400**	~~7.79~~	5.84
09T304EN	0.4	**11600**	~~9.72~~	7.29	**31600**	~~9.72~~	7.29
09T308EN	0.8	**11800**	~~9.72~~	7.29	**31800**	~~9.72~~	7.29

	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

DCMT

CERATIZIT \ Performance



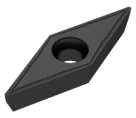


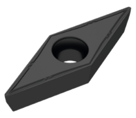
ISO	RE	TCS -M25 CTCM120 DRAGONSKIN F 75 213 ...	PG 1A/08		TCS -M25 CTCM130 DRAGONSKIN F 75 213 ...	PG 1A/08	
	mm		£	£		£	£
070202EN	0.2	**10200**	~~7.79~~	5.84	**30200**	~~7.79~~	5.84
070204EN	0.4	**10400**	~~7.79~~	5.84	**30400**	~~7.79~~	5.84
11T302EN	0.2	**11400**	~~10.96~~	8.22	**31400**	~~10.96~~	8.22
11T304EN	0.4	**11600**	~~10.96~~	8.22	**31600**	~~10.96~~	8.22
11T308EN	0.8	**11800**	~~10.96~~	8.22	**31800**	~~10.96~~	8.22

	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

VCMT

CERATIZIT \ Performance





ISO	RE	TCS -M25 CTCM120 DRAGONSKIN F 75 219 ...	PG 1A/08		TCS -M25 CTCM130 DRAGONSKIN F 75 219 ...	PG 1A/08	
	mm		£	£		£	£
160404EN	0.4	**12800**	~~16.04~~	12.03	**32800**	~~16.04~~	12.03
160408EN	0.8	**13000**	~~16.04~~	12.03	**33000**	~~16.04~~	12.03

	CTCM120	CTCM130
P	○	○
M	●	●
K		
N		
S		○
H		
O		

X7-Line

HRSA and Ti machining made easy

Grade description

CTP X7 10/15

Degree of hardness
10 ISO 10
15 ISO 15
...

Main application – material	
P	Steel
M	Stainless steel
K	Cast iron
N	Light and non ferrous metals
S	Super alloys, titanium
H	Hard materials
X	**Universal application**

Application	
1	Turning
2	Milling
3	Grooving
4	Drilling
5	Thread turning
6	Others
7	Multiple procedures*

Universal application range

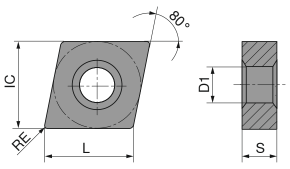
P **M** **K** **N** **S**

*In future multiple procedures possible
turning | grooving | milling

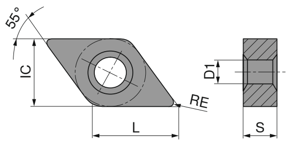
ⓘ Further information on the product can be found in the UP2DATE January 2020 catalogue on page 28-43

CNMG / DNMG / VNMG / WNMG

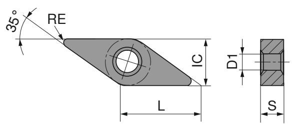
Designation	L mm	S mm	D1 mm	IC mm
CNMG 1204..	12.9	4.76	5.16	12.70
DNMG 1504..	15.5	4.76	5.16	12.70
DNMG 1506..	15.5	6.35	5.16	12.70
VNMG 1604..	16.6	4.76	3.81	9.52
WNMG 0804..	8.6	4.76	5.16	12.70



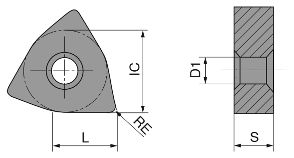
CNMG



DNMG



VNMG



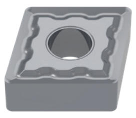
WNMG

CNMG

CERATIZIT \ Performance

TCS

-M34
CTPX710
DRAGONSKIN



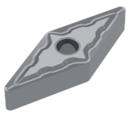
ISO	RE mm	M 75 003 ...	PG 1A/08 £	£
120404EN	0.4	**62800**	~~10.77~~	8.08
120408EN	0.8	**63000**	~~10.77~~	8.08
120412EN	1.2	**63200**	~~10.77~~	8.08
120416EN	1.6	**63400**	~~10.77~~	8.08

P	●
M	●
K	
N	○
S	●
H	
O	

VNMG

CERATIZIT \ Performance

-M34
CTPX710
DRAGONSKIN



ISO	RE mm	M 75 009 ...	PG 1A/08 £	£
160404EN	0.4	**61600**	~~19.61~~	14.71
160408EN	0.8	**61800**	~~19.61~~	14.71
160412EN	1.2	**62000**	~~19.61~~	14.71

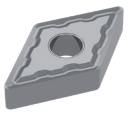
P	●
M	●
K	
N	○
S	●
H	
O	

DNMG

CERATIZIT \ Performance

TCS

-M34
CTPX710
DRAGONSKIN



ISO	RE mm	M 75 004 ...	PG 1A/08 £	£
150404EN	0.4	**61600**	~~15.47~~	11.60
150408EN	0.8	**61800**	~~15.47~~	11.60
150412EN	1.2	**62000**	~~15.47~~	11.60
150608EN	0.8	**63000**	~~16.95~~	12.71
150612EN	1.2	**63200**	~~16.95~~	12.71

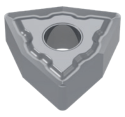
P	●
M	●
K	
N	○
S	●
H	
O	

WNMG

CERATIZIT \ Performance

TCS

-M34
CTPX710
DRAGONSKIN

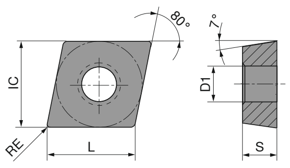


ISO	RE mm	M 75 008 ...	PG 1A/08 £	£
080408EN	0.8	**61800**	~~13.13~~	9.85
080412EN	1.2	**62000**	~~13.13~~	9.85

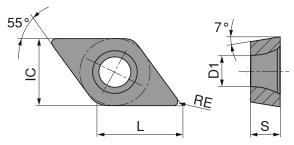
P	●
M	●
K	
N	○
S	●
H	
O	

CCGT / DCGT / VCGT

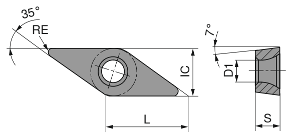
Designation	L mm	S mm	D1 mm	IC mm
CCGT 0602..	6.40	2.38	2.8	6.35
CCGT 09T3..	9.70	3.97	4.4	9.52
CCGT 1204..	12.90	4.76	5.5	12.70
DCGT 0702..	7.75	2.38	2.8	6.35
DCGT 11T3..	11.60	3.97	4.4	9.52
VCGT 1103..	11.10	3.18	2.9	6.35
VCGT 1604..	16.60	4.76	4.4	9.52
VCGT 2205..	22.10	5.56	5.5	12.70



CCGT



DCGT



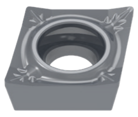
VCGT

CCGT

-25P
CTPX710

DRAGONSKIN

CERATIZIT \ Performance



ISO	RE mm	M 70 248 ...	£	PG 1A/90 £
060202FN	0.2	**70200**	~~13.02~~	9.77
060204FN	0.4	**70400**	~~13.02~~	9.77
09T302FN	0.2	**71400**	~~13.34~~	10.01
09T304FN	0.4	**71600**	~~13.34~~	10.01
09T308FN	0.8	**71800**	~~13.34~~	10.01
120404FN	0.4	**72800**	~~17.03~~	12.77
120408FN	0.8	**73000**	~~17.03~~	12.77

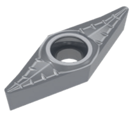
P	●
M	●
K	
N	●
S	●
H	
O	

VCGT

-25P
CTPX710

DRAGONSKIN

CERATIZIT \ Performance



ISO	RE mm	M 70 282 ...	£	PG 1A/90 £
110302FN	0.2	**71400**	~~17.38~~	13.04
110304FN	0.4	**71600**	~~17.38~~	13.04
160404FN	0.4	**72800**	~~21.54~~	16.16
160408FN	0.8	**73000**	~~21.54~~	16.16
160412FN	1.2	**73200**	~~21.54~~	16.16
220530FN	3.0	**75000**	~~28.70~~	21.53

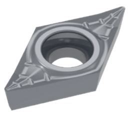
P	●
M	●
K	
N	●
S	●
H	
O	

DCGT

-25P
CTPX710

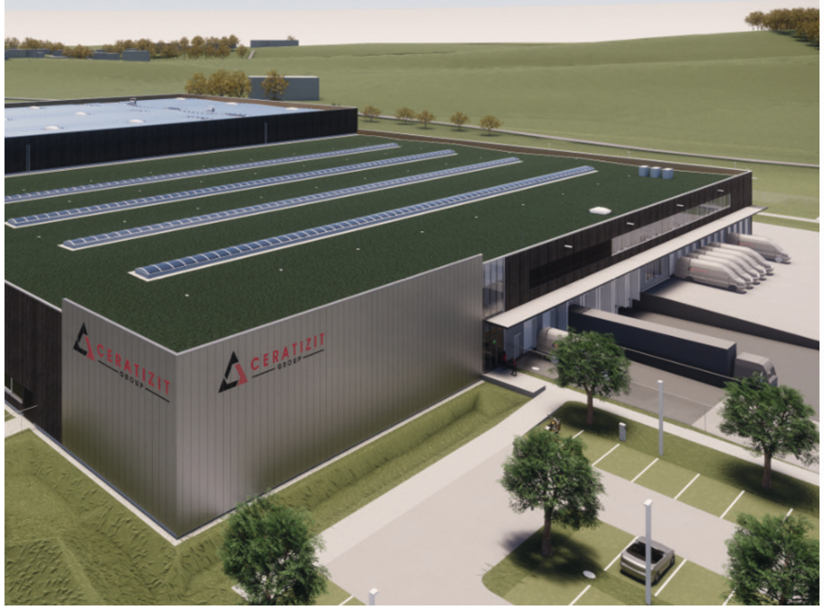
DRAGONSKIN

CERATIZIT \ Performance



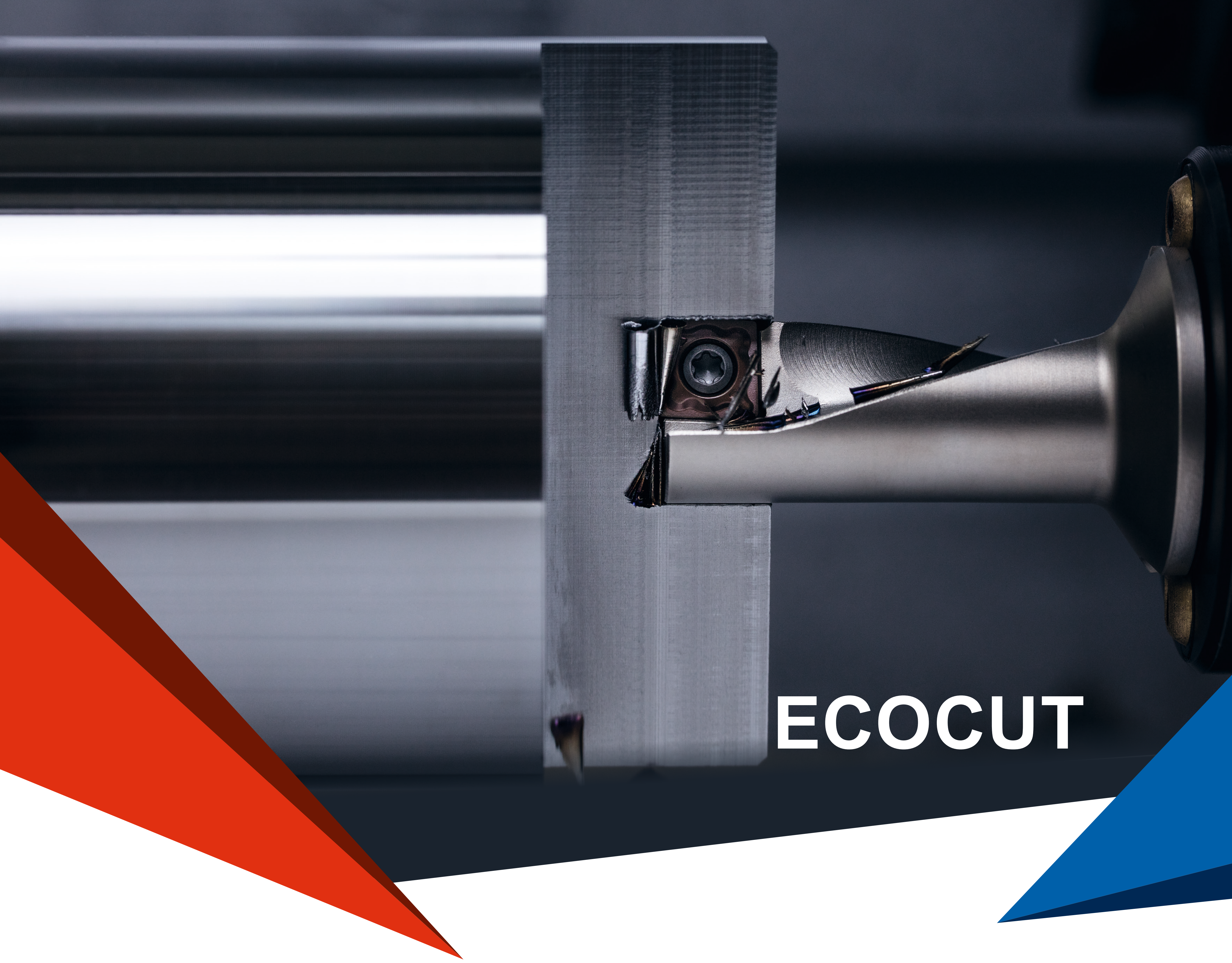
ISO	RE mm	M 70 263 ...	£	PG 1A/90 £
070202FN	0.2	**70200**	~~11.79~~	8.84
070204FN	0.4	**70400**	~~11.79~~	8.84
11T302FN	0.2	**71400**	~~14.24~~	10.68
11T304FN	0.4	**71600**	~~14.24~~	10.68
11T308FN	0.8	**71800**	~~14.24~~	10.68

P	●
M	●
K	
N	●
S	●
H	
O	

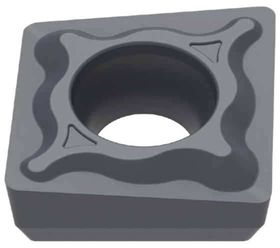


High product availability thanks to state-of-the-art logistics

Why own stock? We take care of that for you! With the cutting-edge logistics center of the cutting tools industry, we guarantee that your order will be delivered promptly.



ECOCUT



CTPP430 – universal grade for all materials.

The Original Multi Function Tool

The trend in machining is unmistakable: Workpieces are becoming increasingly complex and technically challenging. Production often requires a variety of tools, which can not be economically accomodated with the existing turret locations. The answer to this challenge from CERATIZIT is the multi-function tool EcoCut.

EcoCut – Classic 1.5xD

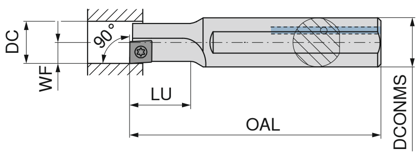
▲ Drilling and turning tool

Scope of supply:

Toolholder with 1 clamping screw + 2 spare screws and screwdriver

≥ Ø 8 mm

CERATIZIT \ Performance



Illustrations show right-hand versions


Steel
Left-hand


Steel
Right-hand

ISO designation	DC	DCONMS	OAL	LU	WF	torque moment	Insert	70 805 ... PG 2B/20			70 804 ... PG 2B/20		
	mm	mm	mm	mm	mm	Nm			£	£		£	£
ECC 10 R/L 1,5D 05	10	12	90	15.0	5.0	0,7	XC.T 0502..	**010**	~~159.46~~	61.00	**010**	~~159.46~~	61.00
ECC 12 R/L 1,5D 06	12	16	100	18.0	6.0	1,0	XC.T 0602..	**012**	~~162.07~~	62.00	**012**	~~162.07~~	62.00
ECC 14 R/L 1,5D 07	14	16	110	21.0	7.0	1,2	XC.T 0703..	**014**	~~165.98~~	63.00	**014**	~~165.98~~	63.00
ECC 16 R/L 1,5D 08	16	20	125	24.0	8.0	2,2	XC.T 0803..	**016**	~~168.59~~	64.00	**016**	~~168.59~~	64.00
ECC 18 R/L 1,5D 09	18	25	135	27.0	9.0	2,2	XC.T 09T3..	**018**	~~194.44~~	74.00	**018**	~~194.44~~	74.00
ECC 20 R/L 1,5D 10	20	25	150	30.0	10.0	3,2	XC.T 10T3..	**020**	~~219.20~~	84.00	**020**	~~219.20~~	84.00
ECC 25 R/L 1,5D 13	25	32	180	37.5	12.5	5,0	XC.T 1304..	**025**	~~252.77~~	96.00	**025**	~~252.77~~	96.00
ECC 32 R/L 1,5D 17	32	40	200	48.0	16.0	5,0	XC.T 1705..	**032**	~~286.56~~	109.00	**032**	~~286.56~~	109.00

EcoCut – Classic 2.25xD

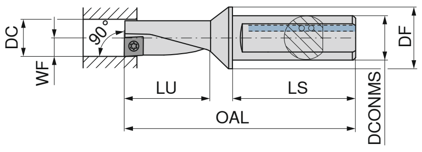
▲ Drilling and turning tool

Scope of supply:

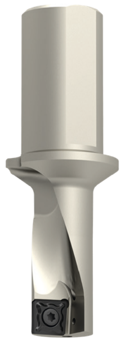
Toolholder with 1 clamping screw + 2 spare screws and screwdriver

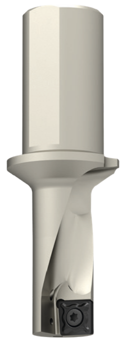
≥ Ø 8 mm

CERATIZIT \ Performance



Illustrations show right-hand versions

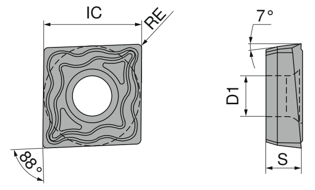

Steel
Left-hand


Steel
Right-hand

ISO designation	DC	DCONMS	OAL	LU	LS	WF	torque moment	Insert	70 805 ... PG 2B/20			70 804 ... PG 2B/20		
	mm	mm	mm	mm	mm	mm	Nm			£	£		£	£
ECC 10 R/L 2,25D 05	10	12	69.5	22.5	42	5.0	0,7	XC.T 0502..	**110**	~~237.24~~	90.00	**110**	~~237.24~~	90.00
ECC 12 R/L 2,25D 06	12	16	78.0	27.0	45	6.0	1,0	XC.T 0602..	**112**	~~243.75~~	93.00	**112**	~~243.75~~	93.00
ECC 14 R/L 2,25D 07	14	16	83.5	31.5	45	7.0	1,2	XC.T 0703..	**114**	~~249.07~~	95.00	**114**	~~249.07~~	95.00
ECC 16 R/L 2,25D 08	16	20	94.0	36.0	50	8.0	2,2	XC.T 0803..	**116**	~~254.28~~	97.00	**116**	~~254.28~~	97.00
ECC 18 R/L 2,25D 09	18	25	109.5	40.5	56	9.0	2,2	XC.T 09T3..	**118**	~~280.13~~	107.00	**118**	~~280.13~~	107.00
ECC 20 R/L 2,25D 10	20	25	111.0	45.0	56	10.0	3,2	XC.T 10T3..	**120**	~~304.90~~	116.00	**120**	~~304.90~~	116.00
ECC 25 R/L 2,25D 13	25	32	129.0	56.5	60	12.5	5,0	XC.T 1304..	**125**	~~354.00~~	135.00	**125**	~~354.00~~	135.00
ECC 32 R/L 2,25D 17	32	40	158.0	72.0	70	16.0	5,0	XC.T 1705..	**132**	~~398.00~~	152.00	**132**	~~398.00~~	152.00

XCNT

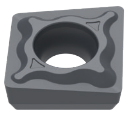
CERATIZIT \ Performance



TCS

CTPP430

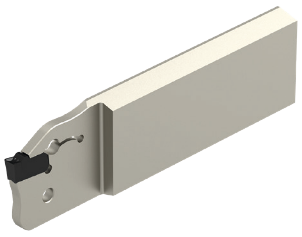
DRAGONSKIN


XCNT

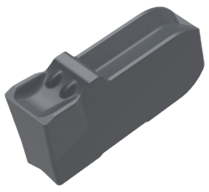
ISO designation	RE	S	D1	IC	70 386 ... PG 1D/19		
	mm	mm	mm	mm		£	£
XCNT 050202EN	0.2	2.10	2.25	5.8	**923**	~~15.51~~	11.63
XCNT 050204EN	0.4	2.10	2.25	5.8	**903**	~~15.51~~	11.63
XCNT 060202EN	0.2	2.38	2.50	6.5	**924**	~~15.51~~	11.63
XCNT 060204EN	0.4	2.38	2.50	6.5	**904**	~~15.51~~	11.63
XCNT 070304EN	0.4	3.18	2.80	7.6	**905**	~~15.51~~	11.63
XCNT 080304EN	0.4	3.18	3.40	8.5	**906**	~~15.74~~	11.81
XCNT 09T304EN	0.4	3.97	3.40	9.6	**907**	~~15.97~~	11.98
XCNT 10T304EN	0.4	3.97	4.40	10.6	**908**	~~16.78~~	12.59
XCNT 10T308EN	0.8	3.97	4.40	10.6	**938**	~~16.78~~	12.59
XCNT 130404EN	0.4	4.76	5.30	13.5	**910**	~~19.19~~	14.39
XCNT 130408EN	0.8	4.76	5.30	13.5	**940**	~~19.19~~	14.39
XCNT 170508EN	0.8	5.56	5.30	17.5	**912**	~~20.23~~	15.17

	70 386 ...
P	●
M	●
K	○
N	○
S	○
H	
O	○

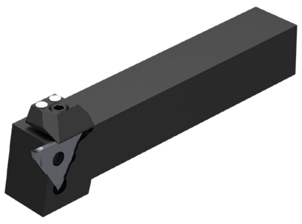
GROOVING TOOLS



SX System – first choice system for parting off.



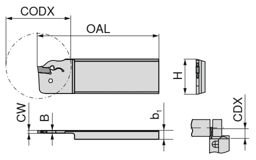
M1 – first choice chipbreaker for parting off.

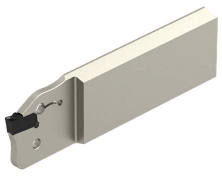


TX System – first choice grooving system for all materials and applications.

MonoClamp – Radial Blade SX reinforced

CERATIZIT \ Performance





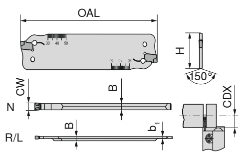
Illustrations show right-hand versions

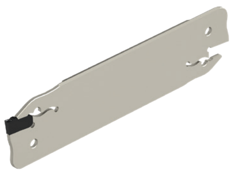
ISO designation	CW mm	H mm	B mm	OAL mm	b_1 mm	CODX mm	CDX mm	for grooving inserts	70 879 ...	PG 2A/25 £	£
XLCF R 2608-SX3	3	26	2.5	110	8	44	22	SX .3..	**013** 1)	~~135.81~~	52.00
XLCF R 3208-SX3	3	32	2.5	110	8	66	33	SX .3..	**003**	~~127.69~~	49.00
XLCF L 3208-SX3	3	32	2.5	110	8	66	33	SX .3..	**203**	~~127.69~~	49.00
XLCF L 2608-SX3	3	26	2.5	110	8	44	22	SX .3..	**213** 1)	~~135.81~~	52.00
XLCF L 3208-SX4	4	32	3.4	110	8	66	33	SX .4..	**204**	~~127.69~~	49.00
XLCF R 3208-SX4	4	32	3.4	110	8	66	33	SX .4..	**004**	~~127.69~~	49.00

1) can be used in both directions

MonoClamp – Radial Blade SX Standard

CERATIZIT \ Performance



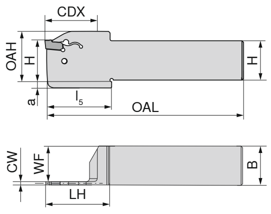


TCS

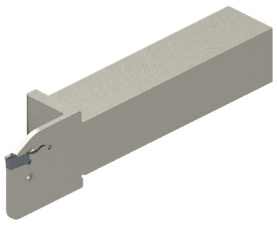
ISO designation	CW mm	H mm	B mm	b_1 mm	OAL mm	CDX mm	for grooving inserts	70 884 ...	PG 2A/25 £	£
XLCF L 2602-SX2	2	26	2.4	1.5	110	25	SX .2..	**212**	~~88.69~~	34.00
XLCF L 3202-SX2	2	32	2.4	1.5	150	25	SX .2..	**202**	~~92.80~~	35.00
XLCF R 2602-SX2	2	26	2.4	1.5	110	25	SX .2..	**012**	~~88.69~~	34.00
XLCF R 3202-SX2	2	32	2.4	1.5	150	25	SX .2..	**002**	~~92.80~~	35.00
XLCF N 2603-SX3	3	26	2.4		110	35	SX .3..	**113**	~~88.69~~	34.00
XLCF N 3203-SX3	3	32	2.4		150	50	SX .3..	**103**	~~92.80~~	35.00
XCLF N 2604-SX4	4	26	3.2		110	40	SX .4..	**114**	~~88.69~~	34.00
XLCF N 3204-SX4	4	32	3.2		150	50	SX .4..	**104**	~~92.80~~	35.00

MonoClamp – Radial Monoholder SX

CERATIZIT \ Performance



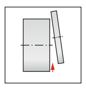
Illustrations show right-hand versions



ISO designation	H mm	B mm	CW mm	WF mm	OAL mm	LH mm	l_5 mm	OAH mm	CDX mm	a mm	Left-hand 70 846 ...	PG 2C/71 £	£	Right-hand 70 846 ...	PG 2C/71 £	£
E20 R/L 0033-2020K-K-SX4	20	20	4	18.30	125	39	40	32	33	5	**42001**	~~118.58~~	45.00	**42000**	~~118.58~~	45.00
E16 R/L 0026-1616K-K-SX2	16	16	2	15.20	125	32	33	26	26	4	**21601**	~~101.03~~	38.00	**21600**	~~101.03~~	38.00
E16 R/L 0026-1616K-K-SX3	16	16	3	14.75	125	32	33	26	26	4	**31601**	~~101.03~~	38.00	**31600**	~~101.03~~	38.00
E20 R/L 0026-2020K-K-SX2	20	20	2	19.20	125	32	33	31	26	5	**22001**	~~118.58~~	45.00	**22000**	~~118.58~~	45.00
E20 R/L 0026-2020K-K-SX3	20	20	3	18.75	125	32	33	31	26	5	**32001**	~~118.58~~	45.00	**32000**	~~118.58~~	45.00
E25 R/L 0026-2525M-K-SX3	25	25	3	23.75	150	33		31	26		**32501**	~~125.78~~	48.00	**32500**	~~125.78~~	48.00
E25 R 0033-2525M-K-SX4	25	25	4	23.30	150	41	42	37	33	5				**42500**	~~125.78~~	48.00
E25 L 0033-2525M-K-SX4	25	25	4	23.30	150	41	42	36	33	5	**42501**	~~125.78~~	48.00			

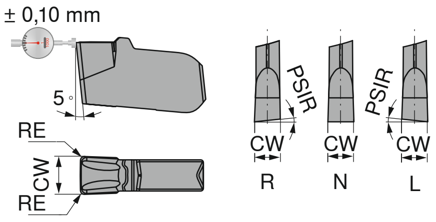
Insert SX

▲ Specially developed geometry with negative edge-chamfers available in right, left and neutral types



F	M	R
		

CERATIZIT \ Performance

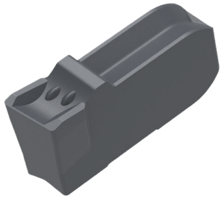


TCS

-M1
CTP1340

DRAGONSKIN

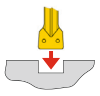
○ ◌ ◌



Designation	IH	CW +/-0,05 mm	70 342 ...	PG 1C/72 £	£
SX E2.00 L 6	L	2	**612**	~~12.11~~	9.08
SX E3.00 L 6	L	3	**613**	~~12.88~~	9.66
SX E4.00 L 6	L	4	**614**	~~13.58~~	10.19
SX E2.00 N 0.20	N	2	**622**	~~12.11~~	9.08
SX E3.00 N 0.20	N	3	**623**	~~12.88~~	9.66
SX E4.00 N 0.30	N	4	**624**	~~13.58~~	10.19
SX E2.00 R 6	R	2	**602**	~~12.11~~	9.08
SX E3.00 R 6	R	3	**603**	~~12.88~~	9.66
SX E4.00 R 6	R	4	**604**	~~13.58~~	10.19
P			●		
M			●		
K			●		
N			○		
S			●		
H					
O			○		

SX-M1

Parting / Grooving

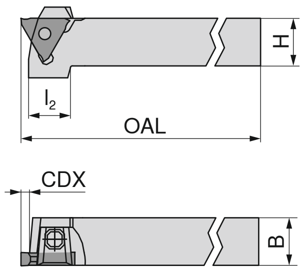


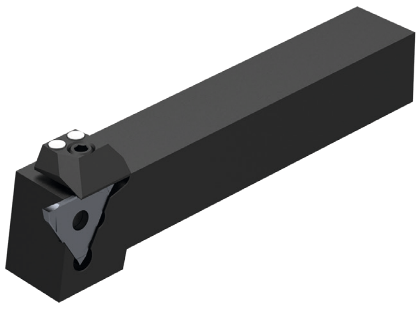
SX-M1	
Cutting width in mm	Feed rate f in mm/rev.
2	0,05–0,15
3	0,10–0,20
4	0,10–0,25
5	0,15–0,30
6	0,15–0,35

MonoClamp – Radial/Axial TX Grooving Holder 0°, 6 mm cutting depth

- ▲ For radial and axial grooving
- ▲ Cutting width 0.5 – 6.3 mm

CERATIZIT \ Performance





Illustrations show right-hand versions

Right-hand

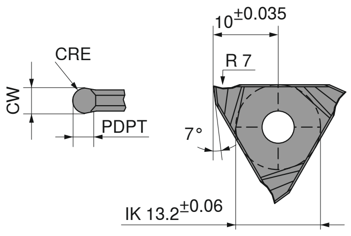
ISO designation	H mm	B +/-0,1 mm	OAL mm	l_2 mm	CDX mm	for grooving inserts	73 500 ...	PG Y6 £	£
R 207.1212.1	12	12	100	24	4	TX R/N/L ...1	**112**	~~213.64~~	81.00
R 207.1616.1	16	16	125	22	4	TX R/N/L ...1	**116**	~~190.68~~	73.00
R 207.2020.1	20	20	125	21	4	TX R/N/L ...1	**120**	~~147.87~~	56.00
R 207.2525.1	25	25	150		4	TX R/N/L ...1	**125**	~~155.61~~	59.00
R 207.1212.2	12	12	100	24	6	TX R/N/L ...2	**212**	~~213.64~~	81.00
R 207.1616.2	16	16	125	22	6	TX R/N/L ...2	**216**	~~190.68~~	73.00
R 207.2020.2	20	20	125	21	6	TX R/N/L ...2	**220**	~~147.87~~	56.00
R 207.2525.2	25	25	150		6	TX R/N/L ...2	**225**	~~155.61~~	59.00
R 207.1212.3	12	12	100	24	6	TX R/N/L ...3	**312**	~~213.64~~	81.00
R 207.1616.3	16	16	125	22	6	TX R/N/L ...3	**316**	~~190.68~~	73.00
R 207.2020.3	20	20	125	21	6	TX R/N/L ...3	**320**	~~147.87~~	56.00
R 207.2525.3	25	25	150		6	TX R/N/L ...3	**325**	~~155.61~~	59.00
R 207.3232.3	32	32	170		6	TX R/N/L ...3	**332**	~~180.86~~	69.00

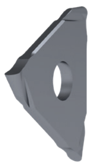
Radial TX insert for corner recessing

- ▲ Full radius for cutting width 0.5–5.0 mm

CERATIZIT \ Performance

CWX500





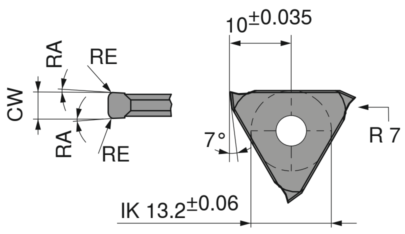
Neutral

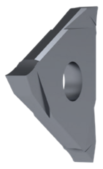
Designation	CRE mm	CW +/-0,05 mm	PDPT mm	73 304 ...	PG Y6 £	£
TX N 0010.20.2	1.0	2	0.7	**204**	~~51.25~~	28.19
TX N 0015.30.3	1.5	3	1.0	**206**	~~54.19~~	29.80

TX insert for fine and copy turning

CERATIZIT \ Performance

CWX500





Neutral

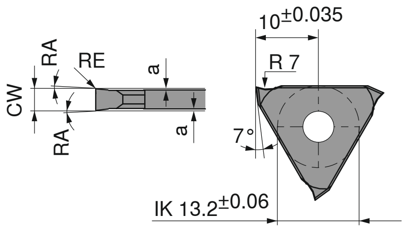
Designation	CW +0,03 mm	73 303 ...	PG Y6 £	£
TX N 0150.02.1	1.5	**204**	~~42.15~~	23.18
TX N 0200.02.1	2.0	**206**	~~42.15~~	23.18
TX N 0200.04.1	2.0	**208**	~~42.15~~	23.18
TX N 0300.06.2	3.0	**212**	~~44.45~~	24.45
TX N 0300.02.2	3.0	**210**	~~44.45~~	24.45
TX N 0300.08.2	3.0	**214**	~~44.45~~	24.45
TX N 0400.08.3	4.0	**218**	~~44.82~~	24.65
TX N 0400.02.3	4.0	**216**	~~44.82~~	24.65
TX N 0400.12.3	4.0	**220**	~~44.82~~	24.65

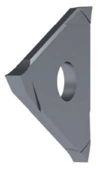
TX insert for circlip grooves

- ▲ For circlip grooves according to DIN 471 / 472

CERATIZIT \ Performance

CWX500





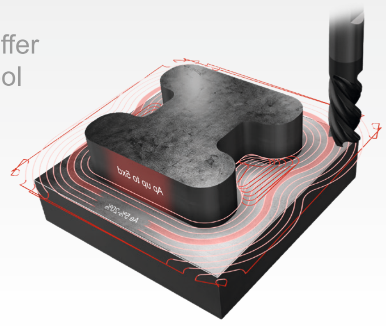
Neutral

Designation	CW -0,05 mm	a +/-0,02 mm	73 300 ...	PG Y6 £	£
TX N 0050.00.1	0.57	0.07	**204**	~~33.77~~	18.57
TX N 0060.00.1	0.67	0.07	**206**	~~33.77~~	18.57
TX N 0070.00.1	0.77	0.08	**208**	~~33.77~~	18.57
TX N 0080.00.1	0.87	0.08	**210**	~~33.77~~	18.57
TX N 0090.00.1	0.97	0.08	**212**	~~33.77~~	18.57
TX N 0100.00.1	1.07	0.09	**214**	~~33.77~~	18.57
TX N 0110.00.1	1.24	0.15	**216**	~~33.77~~	18.57
TX N 0130.00.1	1.44	0.15	**218**	~~33.77~~	18.57
TX N 0160.00.1	1.74	0.20	**220**	~~33.77~~	18.57
TX N 0185.00.1	1.99	0.20	**222**	~~33.77~~	18.57
TX N 0215.00.2	2.29	0.20	**224**	~~33.77~~	18.57
TX N 0265.00.2	2.79	0.20	**226**	~~33.77~~	18.57
TX N 0315.00.3	3.29	0.20	**228**	~~38.52~~	21.19

Tool data always at your fingertips

Cutting data and CAD models for day-to-day assistance

In addition to detailed cutting data we also offer 2D and 3D models to assist you with your tool management or for simulating an operation. All data for this Service is available for you in our Online Shop.



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MINIATURE TURNING TOOLS

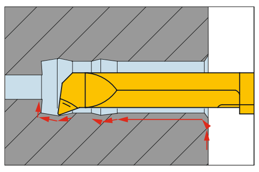
Ultra mini system – for micro diameter internal features from 2 mm up to 8 mm.

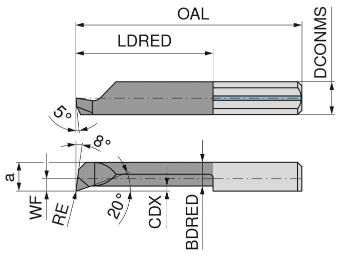
MiniCut system – for small diameter internal features from 8 mm onwards.

UltraMini – Inserts for internal turning and profiling

▲ CDX = Maximum depth of cut when turning outwards

WNT \ Performance





TCS

TiN

Right-hand

ISO designation	DCONMS h6	WF	DMIN	a	OAL	LDRED	CDX	BDRED	RE	73 004 ...		PG Y5
	mm	mm	mm	mm	mm	mm	mm	mm	mm		£	£
R 050.2-5	4		2.0	1.7	19	5	0.1	1.5	0.05	520	~~50.59~~	27.82
R 050.2-10	4		2.0	1.7	24	10	0.1	1.5	0.05	521	~~55.15~~	30.33
R 050.2-15	4		2.0	1.7	29	15	0.1	1.5	0.05	522	~~54.68~~	30.07
R 050.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.10	531	~~58.15~~	31.98
R 050.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.10	530	~~63.79~~	35.08
R 050.3-20	4	0.6	2.8	2.6	34	20	0.2	2.3	0.10	532	~~63.70~~	35.04
R 050.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.10	541	~~57.34~~	31.54
R 050.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.10	540	~~57.34~~	31.54
R 050.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	0.10	542	~~61.12~~	33.62
R 050.4-24	4	1.5	4.0	3.5	38	24	0.3	3.0	0.10	545	~~71.64~~	39.40
R 050.4-28	4	1.5	4.0	3.5	42	28	0.3	3.0	0.10	546	~~78.46~~	43.15
R 050.5-10	5	1.9	5.0	4.4	25	10	0.5	3.8	0.15	551	~~54.25~~	29.84
R 050.5-15	5	1.9	5.0	4.4	30	15	0.5	3.8	0.15	552	~~57.80~~	31.79
R 050.5-20	5	1.9	5.0	4.4	35	20	0.5	3.8	0.15	550	~~59.34~~	32.64
R 050.5-25	5	1.9	5.0	4.4	40	25	0.5	3.8	0.15	553	~~67.03~~	36.87
R 050.5-30	5	1.9	5.0	4.4	45	30	0.5	3.8	0.15	554	~~73.69~~	40.53
R 050.5-35	5	1.9	5.0	4.4	50	35	0.5	3.8	0.15	556	~~85.54~~	47.05
R 050.6-15	6	2.3	6.0	5.3	30	15	0.5	4.5	0.15	561	~~56.73~~	31.20
R 050.6-22	6	2.3	6.0	5.3	37	22	0.5	4.5	0.15	560	~~61.76~~	33.97
R 050.6-25	6	2.3	6.0	5.3	40	25	0.5	4.5	0.15	562	~~65.68~~	36.12
R 050.6-30	6	2.3	6.0	5.3	45	30	0.5	4.5	0.15	563	~~74.64~~	41.05
R 050.6-35	6	2.3	6.0	5.3	50	35	0.5	4.5	0.15	564	~~85.54~~	47.05
R 050.6-42	6	2.3	6.0	5.3	57	42	0.5	4.5	0.15	565	~~97.27~~	53.50
R 050.7-20	7	2.8	6.8	6.3	35	20	0.6	5.5	0.15	572	~~63.02~~	34.66
R 050.7-25	7	2.8	6.8	6.3	40	25	0.6	5.5	0.15	573	~~77.92~~	42.86
R 050.7-30	7	2.8	6.8	6.3	45	30	0.6	5.5	0.15	574	~~79.02~~	43.46
R 050.7-35	7	2.8	7.0	6.3	50	35	0.6	5.5	0.15	575	~~91.11~~	50.11
R 050.7-40	7	2.8	7.0	6.3	55	40	0.6	5.5	0.15	576	~~101.49~~	55.82
R 050.7-45	7	2.8	7.0	6.3	60	45	0.6	5.5	0.15	577	~~105.58~~	58.07
R 050.7-50	7	2.8	7.0	6.3	65	50	0.6	5.5	0.15	578	~~115.78~~	63.68

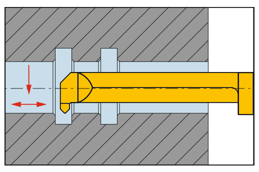
	73 004 ...
P	●
M	●
K	●
N	●
S	○
H	○
O	●

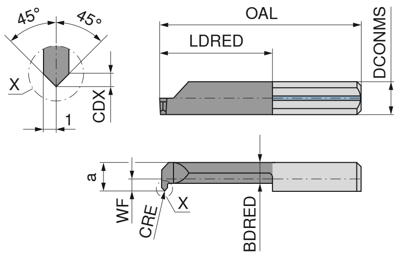
UltraMini – Inserts for internal turning and chamfering

▲ CDX = Maximum depth of cut when turning outwards

WNT \ Performance

TiN





Right-hand

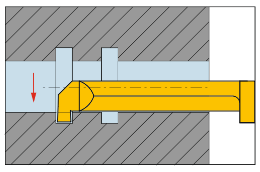
ISO designation	DCONMS h6	WF	DMIN	a	OAL	LDRED	CDX	BDRED	CRE	73 006 ...		PG Y5
	mm	mm	mm	mm	mm	mm	mm	mm	mm		£	£
R 060.5-15	5	1.9	5.0	4.4	30	15	0.7	3.3	0.2	551	~~51.83~~	28.51
R 060.5-20	5	1.9	5.0	4.4	35	20	0.7	3.3	0.2	550	~~57.69~~	31.73
R 060.7-20	7	2.7	6.8	6.3	35	20	0.7	3.8	0.2	570	~~60.19~~	33.10

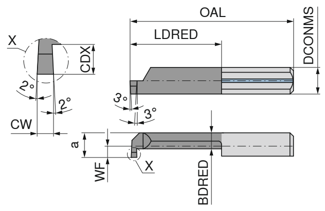
	73 006 ...
P	●
M	●
K	●
N	●
S	○
H	○
O	●

UltraMini – Inserts for Internal Grooving

▲ CDX = Maximum depth of cut when turning outwards

WNT \ Performance





TiN

Right-hand

ISO designation	DCONMS h6 mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	CW mm	73 002 ...	£	PG Y5 £
R 004.0100-10	4	1.5	4.0	3.5	24	10	0.8	2.4	1.0	540	~~51.08~~	28.09
R 004.0100-16	4	1.5	4.0	3.5	30	16	0.8	2.4	1.0	541	~~62.38~~	34.31
R 004.0100-20	4	1.5	4.0	3.5	34	20	0.8	2.4	1.0	542	~~67.24~~	36.98
R 005.0100-10	5	1.9	5.0	4.4	25	10	1.0	3.3	1.0	650	~~50.25~~	27.64
R 005.0150-10	5	1.9	5.0	4.4	25	10	1.0	3.3	1.5	654	~~52.02~~	28.61
R 005.0200-10	5	1.9	5.0	4.4	25	10	1.0	3.3	2.0	658	~~52.02~~	28.61
R 005.0100-15	5	1.9	5.0	4.4	30	15	1.0	3.3	1.0	651	~~58.87~~	32.38
R 005.0150-15	5	1.9	5.0	4.4	30	15	1.0	3.3	1.5	655	~~58.87~~	32.38
R 005.0200-15	5	1.9	5.0	4.4	30	15	1.0	3.3	2.0	659	~~58.87~~	32.38
R 005.0150-20	5	1.9	5.0	4.4	35	20	1.0	3.3	1.5	552	~~66.64~~	36.65
R 005.0100-20	5	1.9	5.0	4.4	35	20	1.0	3.3	1.0	551	~~66.64~~	36.65
R 005.0200-20	5	1.9	5.0	4.4	35	20	1.0	3.3	2.0	553	~~66.64~~	36.65
R 005.0100-25	5	1.9	5.0	4.4	40	25	1.0	3.3	1.0	652	~~73.84~~	40.61
R 005.0150-25	5	1.9	5.0	4.4	40	25	1.0	3.3	1.5	656	~~73.84~~	40.61
R 005.0200-25	5	1.9	5.0	4.4	40	25	1.0	3.3	2.0	750	~~74.32~~	40.88
R 005.0100-30	5	1.9	5.0	4.4	45	30	1.0	3.3	1.0	653	~~82.18~~	45.20
R 005.0150-30	5	1.9	5.0	4.4	45	30	1.0	3.3	1.5	657	~~82.18~~	45.20
R 005.0200-30	5	1.9	5.0	4.4	45	30	1.0	3.3	2.0	751	~~82.81~~	45.55
R 005.0100-35	5	1.9	5.0	4.4	50	35	1.0	3.3	1.0	680	~~89.70~~	49.34
R 006.0100-10	6	2.3	6.0	5.3	25	10	1.8	3.4	1.0	660	~~51.18~~	28.15
R 006.0150-10	6	2.3	6.0	5.3	25	10	1.8	3.4	1.5	664	~~49.01~~	26.96
R 006.0200-10	6	2.3	6.0	5.3	25	10	1.8	3.4	2.0	668	~~51.18~~	28.15
R 006.0100-15	6	2.3	6.0	5.3	30	15	1.8	3.4	1.0	661	~~59.34~~	32.64
R 006.0150-15	6	2.3	6.0	5.3	30	15	1.8	3.4	1.5	665	~~59.34~~	32.64
R 006.0200-15	6	2.3	6.0	5.3	30	15	1.8	3.4	2.0	669	~~59.34~~	32.64
R 006.0150-22	6	2.3	6.0	5.3	37	22	1.8	3.4	1.5	562	~~67.11~~	36.91
R 006.0100-22	6	2.3	6.0	5.3	37	22	1.8	3.4	1.0	561	~~67.11~~	36.91
R 006.0200-22	6	2.3	6.0	5.3	37	22	1.8	3.4	2.0	563	~~67.11~~	36.91
R 006.0100-25	6	2.3	6.0	5.3	40	25	1.8	3.4	1.0	662	~~74.32~~	40.88
R 006.0150-25	6	2.3	6.0	5.3	40	25	1.8	3.4	1.5	666	~~74.32~~	40.88
R 006.0200-25	6	2.3	6.0	5.3	40	25	1.8	3.4	2.0	760	~~74.32~~	40.88
R 006.0150-30	6	2.3	6.0	5.3	45	30	1.8	3.4	1.5	667	~~82.81~~	45.55
R 006.0100-30	6	2.3	6.0	5.3	45	30	1.8	3.4	1.0	663	~~82.81~~	45.55
R 006.0200-30	6	2.3	6.0	5.3	45	30	1.8	3.4	2.0	761	~~82.81~~	45.55
R 006.0150-35	6	2.3	6.0	5.3	50	35	1.8	3.4	1.5	684	~~89.70~~	49.34
R 006.0100-35	6	2.3	6.0	5.3	50	35	1.8	3.4	1.0	682	~~89.70~~	49.34
R 006.0100-42	6	2.3	6.0	5.3	57	42	1.8	3.4	1.0	685	~~100.72~~	55.40
R 007.0200-10	7	2.7	6.8	6.3	25	10	2.5	3.8	2.0	670	~~52.02~~	28.61
R 007.0100-10	7	2.7	6.8	6.3	25	10	2.5	3.8	1.0	570	~~52.02~~	28.61
R 007.0150-10	7	2.7	6.8	6.3	25	10	2.5	3.8	1.5	575	~~52.02~~	28.61
R 007.0150-15	7	2.7	6.8	6.3	30	15	2.5	3.8	1.5	576	~~59.97~~	32.98
R 007.0100-15	7	2.7	6.8	6.3	30	15	2.5	3.8	1.0	571	~~59.97~~	32.98
R 007.0200-15	7	2.7	6.8	6.3	30	15	2.5	3.8	2.0	671	~~57.35~~	31.54
R 007.0200-22	7	2.7	6.8	6.3	37	22	2.5	3.8	2.0	672	~~68.50~~	37.68
R 007.0100-22	7	2.7	6.8	6.3	37	22	2.5	3.8	1.0	572	~~68.50~~	37.68
R 007.0150-22	7	2.7	6.8	6.3	37	22	2.5	3.8	1.5	577	~~68.50~~	37.68
R 007.0150-25	7	2.7	6.8	6.3	40	25	2.5	3.8	1.5	578	~~75.11~~	41.31
R 007.0100-25	7	2.7	6.8	6.3	40	25	2.5	3.8	1.0	573	~~75.11~~	41.31
R 007.0200-25	7	2.7	6.8	6.3	40	25	2.5	3.8	2.0	673	~~74.01~~	40.71
R 007.0150-30	7	2.7	6.8	6.3	45	30	2.5	3.8	1.5	579	~~81.52~~	44.84
R 007.0100-30	7	2.7	6.8	6.3	45	30	2.5	3.8	1.0	574	~~84.21~~	46.32
R 007.0200-30	7	2.7	6.8	6.3	45	30	2.5	3.8	2.0	674	~~79.02~~	43.46
R 007.0100-35	7	2.7	7.0	6.3	50	35	2.5	3.8	1.0	688	~~92.23~~	50.73
R 007.0150-35	7	2.7	7.0	6.3	50	35	2.5	3.8	1.5	690	~~92.23~~	50.73
R 007.0200-35	7	2.7	7.0	6.3	50	35	2.5	3.8	2.0	692	~~92.23~~	50.73
R 007.0150-40	7	2.7	7.0	6.3	55	40	2.5	3.8	1.5	702	~~102.28~~	56.25
R 007.0100-40	7	2.7	7.0	6.3	55	40	2.5	3.8	1.0	700	~~102.28~~	56.25
R 007.0100-45	7	2.7	7.0	6.3	60	45	2.5	3.8	1.0	712	~~111.10~~	61.11
R 007.0100-50	7	2.7	7.0	6.3	65	50	2.5	3.8	1.0	714	~~118.78~~	65.33

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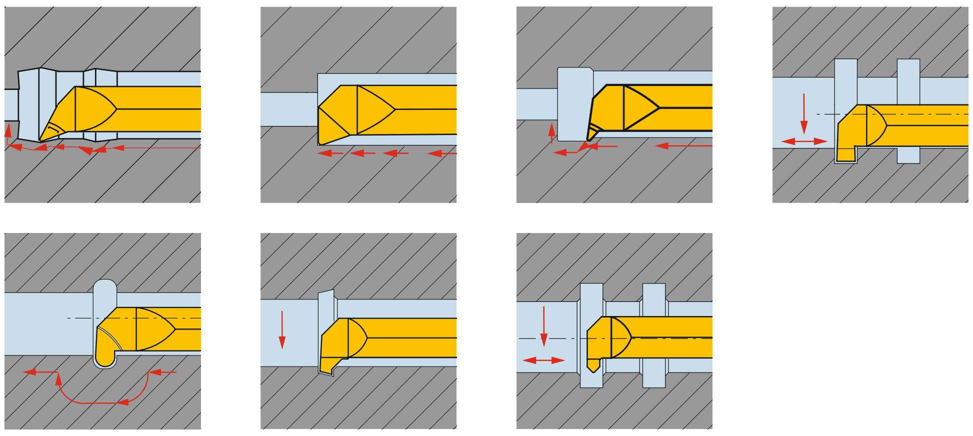
Internal turning and profiling, grooving and chamfering

From Diameter 2.0 mm onwards up to a turning depth of 15.0 mm



Miniature turning tools guide (Main catalogue 2021)

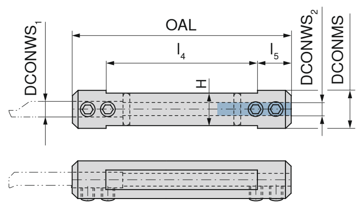
Cutting Data	58–61	Broaching – Recommendations for Correct Use	62
Symbol explanation, coatings and thread types	63		

UltraMini – Standard tool holder for cutting inserts

▲ double ended
▲ Machining diameter from Ø 0.5 mm

Scope of supply:
Tool holder with allen key

WNT \ Performance



Designation	DCONWS$_1$ mm	DCONWS$_2$ mm	DCONMS mm	OAL mm	l_4 mm	l_5 mm	H mm	73 080 ...	£	PG Y5 £
645.0012-D	4	5	12	75	55	10	10.3	163	~~190.72~~	73.00
645.0016-D	4	5	16	75	55	10	14.0	164	~~200.33~~	110.18
645.0020-D	4	5	20	90	70	10	18.0	165	~~215.72~~	82.00
676.0016-D	6	7	16	75	55	10	14.0	166	~~200.33~~	110.18
676.0020-D	6	7	20	90	70	10	18.0	167	~~215.72~~	82.00

UltraMini – Quick change tool holder for cutting inserts

Scope of supply:
Tool holder, lock nut and clamping wedge

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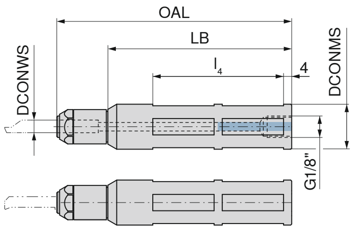
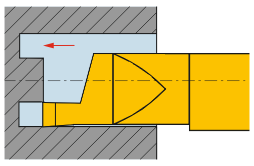


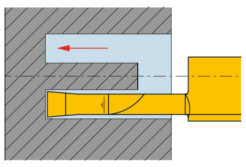
Designation	DCONWS mm	DCONMS g6 mm	OAL mm	LB mm	l_4 mm	73 089 ...	£	PG Y5 £
UM600H.0012.4	4	12.00	115	90	64	124	~~360.02~~	137.00
UM600H.0016.4	4	16.00	115	90	64	164	~~326.63~~	124.00
UM600H.001905.4	4	19.05	115	90	64	194	~~350.49~~	134.00
UM600H.0020.4	4	20.00	115	90	64	204	~~345.72~~	132.00
UM600H.0022.4	4	22.00	115	90	64	224	~~351.68~~	134.00
UM600H.0025.4	4	25.00	115	90	64	254	~~358.83~~	137.00
UM600H.00254.4	4	25.40	115	90	64	264	~~365.99~~	139.00
UM600H.0028.4	4	28.00	115	90	64	284	~~365.99~~	139.00
UM600H.0012.5	5	12.00	115	90	64	125	~~360.02~~	137.00
UM600H.0016.5	5	16.00	115	90	64	165	~~326.63~~	124.00
UM600H.001905.5	5	19.05	115	90	64	195	~~350.49~~	134.00
UM600H.0020.5	5	20.00	115	90	64	205	~~345.72~~	132.00
UM600H.0022.5	5	22.00	115	90	64	225	~~351.68~~	134.00
UM600H.0025.5	5	25.00	115	90	64	255	~~358.83~~	137.00
UM600H.00254.5	5	25.40	115	90	64	265	~~365.99~~	139.00
UM600H.0028.5	5	28.00	115	90	64	285	~~365.99~~	139.00
UM600H.0012.6	6	12.00	115	90	64	126	~~360.02~~	137.00
UM600H.0016.6	6	16.00	115	90	64	166	~~326.63~~	124.00
UM600H.001905.6	6	19.05	115	90	64	196	~~350.49~~	134.00
UM600H.0020.6	6	20.00	115	90	64	206	~~345.72~~	132.00
UM600H.0022.6	6	22.00	115	90	64	226	~~351.68~~	134.00
UM600H.0025.6	6	25.00	115	90	64	256	~~358.83~~	137.00
UM600H.00254.6	6	25.40	115	90	64	266	~~365.99~~	139.00
UM600H.0028.6	6	28.00	115	90	64	286	~~365.99~~	139.00
UM600H.0012.7	7	12.00	115	90	64	127	~~360.02~~	137.00
UM600H.0016.7	7	16.00	115	90	64	167	~~326.63~~	124.00
UM600H.001905.7	7	19.05	115	90	64	197	~~350.49~~	134.00
UM600H.0020.7	7	20.00	115	90	64	207	~~345.72~~	132.00
UM600H.0022.7	7	22.00	115	90	64	227	~~351.68~~	134.00
UM600H.0025.7	7	25.00	115	90	64	257	~~358.83~~	137.00
UM600H.00254.7	7	25.40	115	90	64	267	~~365.99~~	139.00
UM600H.0028.7	7	28.00	115	90	64	287	~~365.99~~	139.00

Avoid pulling cuts. When using thro' coolant supply, tighten using key!

Axial grooving

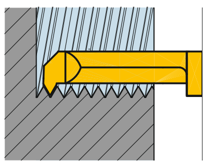


Minimum external diameter of groove 6.0 mm
At 1.5 mm grooving width
Up to 2.0 mm grooving depth



Minimum external diameter of groove 15.0 mm
At 3.0 mm grooving width
Up to 30.0 mm grooving depth

Thread turning



Turning of external threads from diameter 4.0 mm onwards
▲ Metric standard and fine thread
▲ Whitworth pipe threads

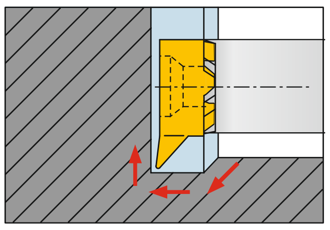
The rest of the comprehensive UltraMini range is available in the main catalogue.

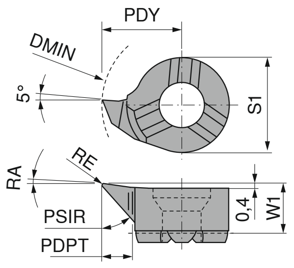
MiniCut – Internal undercut insert

▲ CDX = ap_{max} (material dependant)

WNT \ Performance

CWX500





Size	ISO designation	DMIN mm	PDPT mm	W1 mm	PDY mm	S1 mm	RE mm	CDX mm	PSIR °	RA °	Right-hand 73 326 ...	PG £	Y5 £
08	8,00. R .30°.1,0	7.8	1.0	3.5	4.65	6	0.2	0.4	30	3	010	~~47.19~~	25.95
	8,00. R .47°.1,2	7.8	1.2	3.5	4.65	6	0.2	0.4	47	3	012	~~40.99~~	22.54
11	11,00. R .30°.2,3	11.0	2.3	4.2	6.70	8	0.2	0.6	30	3	423	~~46.08~~	25.34
	11,00. R .47°.2,3	11.0	2.3	4.2	6.70	8	0.2	0.6	47	3	323	~~39.91~~	21.95
14	13,70. R .47°.3,0	13.7	3.0	5.3	8.70	9	0.2	0.8	47	3	530	~~40.99~~	22.54
	13,70. R .30°.4,0	13.7	4.0	5.3	8.70	9	0.2	0.8	30	3	540	~~47.19~~	25.95

	73 326 ...
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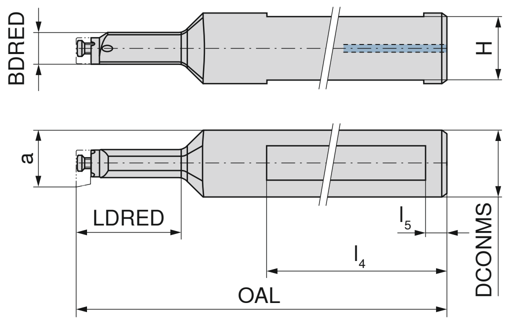
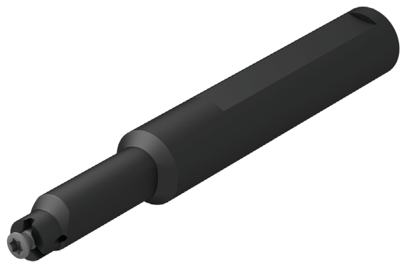
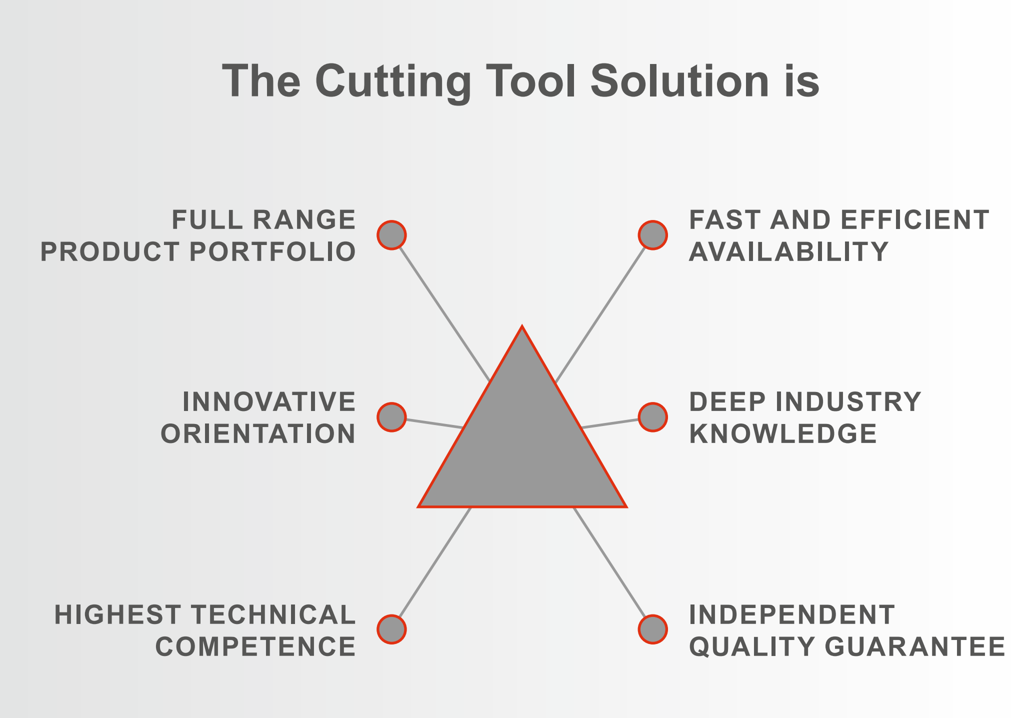
MiniCut – Steel Tool holder

WNT \ Performance





Designation	a mm	$DCONMS_{f7}$ mm	OAL mm	l_4 mm	LDRED mm	BDRED mm	H mm	l_5 mm	73 522 ...	PG £	Y5 £
8,00/16.N.12.1,0	7.8	16	80	60	12		15.0	5	012	~~211.13~~	80.00
8,00/16.N.22.1,0	7.8	16	90	60	22	7.0	15.0	5	122	~~242.27~~	92.00
11,00/16.N.16.2,3	10.7	16	97	60	16		14.5	5	016	~~211.13~~	80.00
11,00/16.N.29.2,3	10.7	16	110	60	29	9.5	14.5	5	129	~~242.27~~	92.00
14,00/16.N.18.4,0	13.8	16	100	60	18	11.0	14.5	5	018	~~242.27~~	92.00
14,00/16.N.38.4,0	13.8	16	120	60	38	11.0	14.5	5	138	~~242.27~~	92.00



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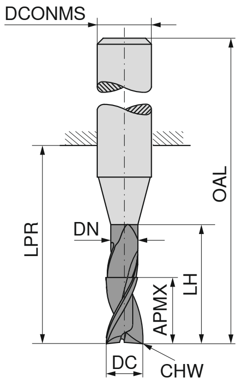
- ▲ Increased range of flute options
- ▲ HA shank options
- ▲ Versions with thro' coolant
- ▲ Roughing-finishing milling cutters
- ▲ Rough milling cutters
- ▲ Full slot milling cutters

SilverLine – End milling cutter

N | λ_s=45° γ_s= 5° | ZEFP | HPC



WNT \ Performance

DPB72S	DPB72S	DPB72S
DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
		
≈DIN 6527	≈DIN 6527	≈DIN 6527
HB	HB	HB

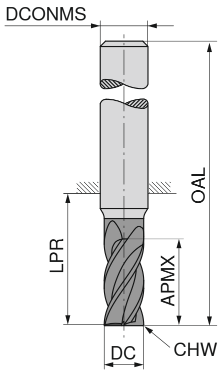
DC f8	APMX	DN	LH	LPR	OAL	DCONMS h6	CHW	ZEFP	50 966 ...	PG V0		50 966 ...	PG V0		50 966 ...	PG V0	
mm	mm	mm	mm	mm	mm	mm	mm			£	£		£	£		£	£
3.0	8	2.9	15	21	57	6	0.1	3				03200	~~66.18~~	46.33			
3.5	11	3.4	16	21	57	6	0.1	3				03700	~~66.18~~	46.33			
4.0	8	3.9	15	18	54	6	0.1	3	04100	~~63.81~~	44.67						
4.0	11	3.9	16	21	57	6	0.1	3				04200	~~63.81~~	44.67			
4.0	16			26	62	6	0.1	3							04400	~~67.27~~	47.09
4.5	13	4.4	19	21	57	6	0.1	3				04700	~~66.18~~	46.33			
5.0	9	4.9	16	18	54	6	0.1	3	05100	~~63.81~~	44.67						
5.0	13	4.9	19	21	57	6	0.1	3				05200	~~63.81~~	44.67			
5.0	17			26	62	6	0.1	3							05400	~~67.27~~	47.09
5.5	13	5.4	19	21	57	6	0.1	3				05700	~~69.45~~	48.62			
6.0	10	5.9	17	18	54	6	0.2	3	06100	~~66.36~~	46.45						
6.0	13	5.9	19	21	57	6	0.2	3				06200	~~67.16~~	47.01			
6.0	18			26	62	6	0.2	3							06400	~~74.61~~	52.23
6.5	19	6.3	25	27	63	8	0.2	3				06700	~~80.73~~	56.51			
7.0	19	6.8	25	27	63	8	0.2	3				07200	~~80.73~~	56.51			
7.5	19	7.3	25	27	63	8	0.2	3				07700	~~80.73~~	56.51			
8.0	12	7.8	20	22	58	8	0.2	3	08100	~~75.40~~	52.78						
8.0	19	7.8	25	27	63	8	0.2	3				08200	~~78.40~~	54.88			
8.0	24			32	68	8	0.2	3							08400	~~83.81~~	58.67
8.5	22	8.2	30	32	72	10	0.2	3				08700	~~134.55~~	94.19			
9.0	22	8.7	30	32	72	10	0.2	3				09200	~~134.55~~	94.19			
9.5	22	9.2	30	32	72	10	0.2	3				09700	~~134.55~~	94.19			
10.0	14	9.7	24	26	66	10	0.2	3	10100	~~119.19~~	83.43						
10.0	22	9.7	30	32	72	10	0.2	3				10200	~~132.08~~	92.46			
10.0	30			40	80	10	0.2	3							10400	~~149.21~~	104.45
12.0	16	11.7	26	28	73	12	0.2	3	12100	~~167.12~~	116.98						
12.0	26	11.7	36	38	83	12	0.2	3				12200	~~178.87~~	125.21			
12.0	36			48	93	12	0.2	3							12400	~~202.51~~	141.76
14.0	18	13.7	28	30	75	14	0.2	3	14100	~~206.39~~	144.47						
14.0	26	13.7	36	38	83	14	0.2	3				14200	~~235.91~~	165.14			
14.0	42			54	99	14	0.2	3							14400	~~262.29~~	183.60
16.0	22	15.5	32	34	82	16	0.2	3	16100	~~249.82~~	174.87						
16.0	32	15.5	42	44	92	16	0.2	3				16200	~~400.30~~	280.21			
16.0	48			60	108	16	0.2	3							16400	~~404.75~~	283.33
18.0	24	17.5	34	36	84	18	0.2	3	18100	~~344.69~~	241.28						
18.0	32	17.5	42	44	92	18	0.2	3				18200	~~412.63~~	288.84			
18.0	54			66	114	18	0.2	3							18400	~~521.85~~	365.30
20.0	26	19.5	40	42	92	20	0.2	3	20100	~~422.38~~	295.67						
20.0	38	19.5	52	54	104	20	0.2	3				20200	~~481.43~~	337.00			
20.0	60			76	126	20	0.2	3							20400	~~602.54~~	421.78

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

SilverLine – End milling cutter

N | λ_s = 35° 38° γ_s = 9° | ZEFP | HPC

WNT \ Performance



							TCS			TCS			TCS			TCS		
							DPB72S			DPB72S			DPB72S			DPB72S		
							DRAGONSKIN			DRAGONSKIN			DRAGONSKIN			DRAGONSKIN		
							≈DIN 6527			≈DIN 6527			≈DIN 6527			≈DIN 6527		
							HA			HB			HA			HB		
DC f8	APMX	LPR	OAL	DCONMS h6	CHW	ZEFP	**50 972 ...**	PG V0		**50 973 ...**	PG V0		**50 972 ...**	PG V0		**50 973 ...**	PG V0	
mm	mm	mm	mm	mm	mm			£	£		£	£		£	£		£	£
3.0	5	14	50	6	0.1	4	**03100**	~~54.76~~	38.33	**03100**	~~54.76~~	38.33						
3.0	8	21	57	6	0.1	4							**03200**	~~54.76~~	38.33	**03200**	~~54.76~~	38.33
3.5	8	18	54	6	0.1	4	**03600**	~~54.76~~	38.33	**03600**	~~54.76~~	38.33						
3.5	11	21	57	6	0.1	4							**03700**	~~54.76~~	38.33	**03700**	~~54.76~~	38.33
4.0	8	18	54	6	0.1	4	**04100**	~~54.76~~	38.33	**04100**	~~54.76~~	38.33						
4.0	11	21	57	6	0.1	4							**04200**	~~54.76~~	38.33	**04200**	~~54.76~~	38.33
4.5	9	18	54	6	0.1	4	**04600**	~~55.90~~	39.13	**04600**	~~55.90~~	39.13						
4.5	13	21	57	6	0.1	4							**04700**	~~55.90~~	39.13	**04700**	~~55.90~~	39.13
5.0	9	18	54	6	0.1	4	**05100**	~~55.90~~	39.13	**05100**	~~55.90~~	39.13						
5.0	13	21	57	6	0.1	4							**05200**	~~55.90~~	39.13	**05200**	~~55.90~~	39.13
5.5	10	18	54	6	0.1	4	**05600**	~~54.08~~	37.86	**05600**	~~54.08~~	37.86						
5.5	13	21	57	6	0.1	4							**05700**	~~54.08~~	37.86	**05700**	~~54.08~~	37.86
6.0	10	18	54	6	0.1	4	**06100**	~~54.08~~	37.86	**06100**	~~54.08~~	37.86						
6.0	13	21	57	6	0.1	4							**06200**	~~54.08~~	37.86	**06200**	~~54.08~~	37.86
7.0	12	22	58	8	0.2	4	**07100**	~~71.91~~	50.34	**07100**	~~71.91~~	50.34						
7.0	21	27	63	8	0.2	4							**07200**	~~71.91~~	50.34	**07200**	~~71.91~~	50.34
8.0	12	22	58	8	0.2	4	**08100**	~~71.91~~	50.34	**08100**	~~71.91~~	50.34						
8.0	21	27	63	8	0.2	4							**08200**	~~71.91~~	50.34	**08200**	~~71.91~~	50.34
9.0	14	26	66	10	0.2	4	**09100**	~~93.85~~	65.70	**09100**	~~93.85~~	65.70						
9.0	22	32	72	10	0.2	4							**09200**	~~93.85~~	65.70	**09200**	~~93.85~~	65.70
10.0	14	26	66	10	0.2	4	**10100**	~~93.85~~	65.70	**10100**	~~93.85~~	65.70						
10.0	22	32	72	10	0.2	4							**10200**	~~93.85~~	65.70	**10200**	~~93.85~~	65.70
11.0	16	28	73	12	0.3	4	**11100**	~~148.34~~	103.84	**11100**	~~148.34~~	103.84						
11.0	26	38	83	12	0.3	4							**11200**	~~148.34~~	103.84	**11200**	~~148.34~~	103.84
12.0	16	28	73	12	0.3	4	**12100**	~~148.34~~	103.84	**12100**	~~148.34~~	103.84						
12.0	26	38	83	12	0.3	4							**12200**	~~148.34~~	103.84	**12200**	~~148.34~~	103.84
14.0	16	28	73	14	0.3	4	**14100**	~~190.63~~	133.44	**14100**	~~190.63~~	133.44						
14.0	26	38	83	14	0.3	4							**14200**	~~190.63~~	133.44	**14200**	~~190.63~~	133.44
15.0	22	34	82	16	0.3	4	**15100**	~~235.48~~	164.84	**15100**	~~235.48~~	164.84						
15.0	36	44	92	16	0.3	4							**15200**	~~235.48~~	164.84	**15200**	~~235.48~~	164.84
16.0	22	34	82	16	0.3	4	**16100**	~~235.48~~	164.84	**16100**	~~235.48~~	164.84						
16.0	36	44	92	16	0.3	4							**16200**	~~235.48~~	164.84	**16200**	~~235.48~~	164.84
17.0	22	34	82	18	0.3	4	**17100**	~~320.19~~	224.13	**17100**	~~320.19~~	224.13						
17.0	36	44	92	18	0.3	4							**17200**	~~320.19~~	224.13	**17200**	~~320.19~~	224.13
18.0	22	34	82	18	0.3	4	**18100**	~~320.19~~	224.13	**18100**	~~320.19~~	224.13						
18.0	36	44	92	18	0.3	4							**18200**	~~320.19~~	224.13	**18200**	~~320.19~~	224.13
19.0	26	42	92	20	0.3	4	**19100**	~~363.33~~	254.33	**19100**	~~363.33~~	254.33						
19.0	41	54	104	20	0.3	4							**19200**	~~363.33~~	254.33	**19200**	~~363.33~~	254.33
20.0	26	42	92	20	0.3	4	**20100**	~~363.33~~	254.33	**20100**	~~363.33~~	254.33						
20.0	41	54	104	20	0.3	4							**20200**	~~363.33~~	254.33	**20200**	~~363.33~~	254.33

	50 972 ... HA	50 973 ... HB	50 972 ... HA	50 973 ... HB
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H				
O				

CERATIZIT worldwide

CERATIZIT Group

▲	Headquarters
▲	Production & Sales
△	Production
◭	Sales

CB-CERATIZIT

▲	Production & Sales
△	Production
◭	Sales

SilverLine – End milling cutter

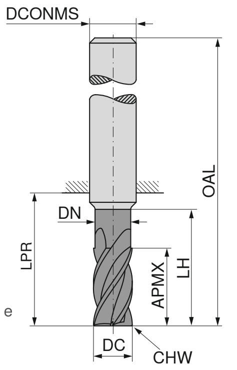
▲ Especially for high-volume milling

N

λs=17° 45°
γs=15°

ZEFP

HPC



WNT \ Performance

DPB72S

DRAGONSKIN

DIN 6527

HA

DPB72S

DRAGONSKIN

DIN 6527

HB

DC f8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	CHW mm	ZEFP	50 976 ... PG V0	£	£	50 977 ... PG V0	£	£
3	8	2.8	13	21	57	6	0.1	4	**03200**	~~76.48~~	53.54	**03200**	~~76.48~~	53.54
4	11	3.8	17	21	57	6	0.1	4	**04200**	~~76.48~~	53.54	**04200**	~~76.48~~	53.54
5	13	4.8	19	21	57	6	0.1	4	**05200**	~~76.48~~	53.54	**05200**	~~76.48~~	53.54
6	13	5.8	19	21	57	6	0.1	4	**06200**	~~80.35~~	56.25	**06200**	~~80.35~~	56.25
8	21	7.7	25	27	63	8	0.2	4	**08200**	~~92.12~~	64.48	**08200**	~~92.12~~	64.48
10	22	9.7	30	32	72	10	0.2	4	**10200**	~~158.24~~	110.77	**10200**	~~158.24~~	110.77
12	26	11.6	36	38	83	12	0.3	4	**12200**	~~214.41~~	150.09	**12200**	~~214.41~~	150.09
14	26	13.6	36	38	83	14	0.3	4	**14200**	~~315.75~~	221.03	**14200**	~~315.75~~	221.03
16	36	15.5	42	44	92	16	0.3	4	**16200**	~~400.45~~	280.32	**16200**	~~400.45~~	280.32
18	36	17.5	42	44	92	18	0.3	4	**18200**	~~552.80~~	386.96	**18200**	~~552.80~~	386.96
20	41	19.5	52	54	104	20	0.3	4	**20200**	~~575.45~~	402.82	**20200**	~~575.45~~	402.82

	50 976 ...	50 977 ...
P	●	●
M	●	●
K	●	●
N	○	○
S		
H		
O		

SilverLine – Rough milling cutter

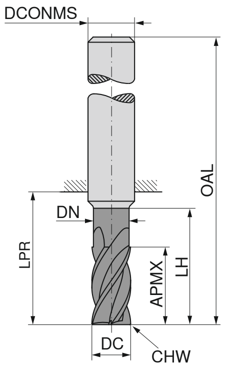
▲ With roughing profile

NR

λs=35° 38°
γs= 9°

ZEFP

HPC



WNT \ Performance

DPB72S

DRAGONSKIN

DIN 6527

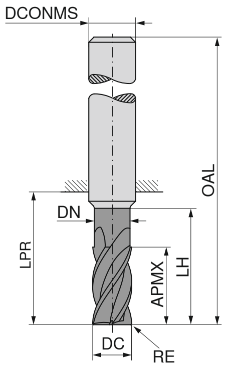
HB

DC f8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	CHW mm	ZEFP	50 979 ... PG V0	£	£
3.0	8	2.8	13	21	57	6	0.1	4	**03200**	~~157.66~~	110.36
3.5	11	3.3	17	21	57	6	0.1	4	**03700**	~~157.66~~	110.36
4.0	11	3.8	17	21	57	6	0.1	4	**04200**	~~157.66~~	110.36
4.5	13	4.3	19	21	57	6	0.1	4	**04700**	~~157.66~~	110.36
5.0	13	4.8	19	21	57	6	0.1	4	**05200**	~~157.66~~	110.36
5.5	13	5.3	19	21	57	6	0.1	4	**05700**	~~157.66~~	110.36
6.0	13	5.8	19	21	57	6	0.1	4	**06200**	~~157.66~~	110.36
7.0	21	6.7	25	27	63	8	0.2	4	**07200**	~~169.84~~	118.89
8.0	21	7.7	25	27	63	8	0.2	4	**08200**	~~169.84~~	118.89
9.0	22	8.7	30	32	72	10	0.2	4	**09200**	~~178.44~~	124.91
10.0	22	9.7	30	32	72	10	0.2	4	**10200**	~~178.44~~	124.91
11.0	26	10.6	36	38	83	12	0.3	4	**11200**	~~249.10~~	174.37
12.0	26	11.6	36	38	83	12	0.3	4	**12200**	~~249.10~~	174.37
14.0	26	13.6	36	38	83	14	0.3	4	**14200**	~~356.59~~	249.61
15.0	36	14.5	42	44	92	16	0.3	4	**15200**	~~356.59~~	249.61
16.0	36	15.5	42	44	92	16	0.3	4	**16200**	~~356.59~~	249.61
17.0	36	16.5	42	44	92	18	0.3	4	**17200**	~~417.36~~	292.15
18.0	36	17.5	42	44	92	18	0.3	4	**18200**	~~417.36~~	292.15
19.0	41	18.5	52	54	104	20	0.3	4	**19200**	~~561.69~~	393.18
20.0	41	19.5	52	54	104	20	0.3	4	**20200**	~~561.69~~	393.18

	50 979 ...
P	●
M	●
K	●
N	○
S	●
H	
O	

SilverLine – End milling cutter with corner radius

N | λ_s = 35° 38° γ_s = 9° | ZEFP | HPC



WNT \ Performance

									DPB72S			DPB72S			DPB72S			DPB72S		
									DRAGONSKIN			DRAGONSKIN			DRAGONSKIN			DRAGONSKIN		
									Factory standard			Factory standard			Factory standard			Factory standard		
									HA			HB			HA			HB		
DC f8	RE ±0,01	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	50 970 ...	PG V0		50 971 ...	PG V0		50 970 ...	PG V0		50 971 ...	PG V0	
mm	mm	mm	mm	mm	mm	mm	mm			£	£		£	£		£	£		£	£
3	0.10	8.0	2.8	13	21	57	6	4	03201	~~73.80~~	51.66	03201	~~73.80~~	51.66						
3	0.40	8.0	2.8	13	21	57	6	4	03204	~~73.80~~	51.66	03204	~~73.80~~	51.66						
3	0.50	8.0	2.8	13	21	57	6	4	03205	~~73.80~~	51.66	03205	~~73.80~~	51.66						
3	1.00	8.0	2.8	13	21	57	6	4	03210	~~73.80~~	51.66	03210	~~73.80~~	51.66						
3	0.50	6.5	2.8	15	22	58	6	4							03405	~~86.74~~	60.72	03405	~~86.74~~	60.72
3	0.30	6.5	2.8	15	22	58	6	4							03403	~~86.74~~	60.72	03403	~~86.74~~	60.72
3	0.80	6.5	2.8	15	22	58	6	4							03408	~~86.74~~	60.72	03408	~~86.74~~	60.72
4	0.40	11.0	3.8	17	21	57	6	4	04204	~~73.80~~	51.66	04204	~~73.80~~	51.66						
4	0.10	11.0	3.8	17	21	57	6	4	04201	~~73.80~~	51.66	04201	~~73.80~~	51.66						
4	0.50	11.0	3.8	17	21	57	6	4	04205	~~73.80~~	51.66	04205	~~73.80~~	51.66						
4	1.00	11.0	3.8	17	21	57	6	4	04210	~~73.80~~	51.66	04210	~~73.80~~	51.66						
4	0.50	8.5	3.8	20	26	62	6	4							04405	~~86.74~~	60.72	04405	~~86.74~~	60.72
4	0.40	8.5	3.8	20	26	62	6	4							04404	~~86.74~~	60.72	04404	~~86.74~~	60.72
4	0.80	8.5	3.8	20	26	62	6	4							04408	~~86.74~~	60.72	04408	~~86.74~~	60.72
5	1.00	13.0	4.8	19	21	57	6	4	05210	~~75.00~~	52.50	05210	~~75.00~~	52.50						
5	0.10	13.0	4.8	19	21	57	6	4	05201	~~75.00~~	52.50	05201	~~75.00~~	52.50						
5	0.50	13.0	4.8	19	21	57	6	4	05205	~~75.00~~	52.50	05205	~~75.00~~	52.50						
5	0.80	10.5	4.8	25	34	70	6	4							05408	~~88.11~~	61.68	05408	~~88.11~~	61.68
5	0.50	10.5	4.8	25	34	70	6	4							05405	~~88.11~~	61.68	05405	~~88.11~~	61.68
6	1.00	13.0	5.8	19	21	57	6	4	06210	~~73.19~~	51.23	06210	~~73.19~~	51.23						
6	0.10	13.0	5.8	19	21	57	6	4	06201	~~73.19~~	51.23	06201	~~73.19~~	51.23						
6	0.50	13.0	5.8	19	21	57	6	4	06205	~~73.19~~	51.23	06205	~~73.19~~	51.23						
6	1.50	13.0	5.8	19	21	57	6	4	06215	~~73.19~~	51.23	06215	~~73.19~~	51.23						
6	0.80	13.0	5.8	30	34	70	6	4							06408	~~88.11~~	61.68	06408	~~88.11~~	61.68
6	0.60	13.0	5.8	30	34	70	6	4							06406	~~88.11~~	61.68	06406	~~88.11~~	61.68
6	1.00	13.0	5.8	30	34	70	6	4							06410	~~88.11~~	61.68	06410	~~88.11~~	61.68
8	0.50	21.0	7.7	25	27	63	8	4	08205	~~91.76~~	64.23	08205	~~91.76~~	64.23						
8	0.15	21.0	7.7	25	27	63	8	4	08202	~~91.76~~	64.23	08202	~~91.76~~	64.23						
8	1.00	21.0	7.7	25	27	63	8	4	08210	~~91.76~~	64.23	08210	~~91.76~~	64.23						
8	1.50	21.0	7.7	25	27	63	8	4	08215	~~91.76~~	64.23	08215	~~91.76~~	64.23						
8	2.00	21.0	7.7	25	27	63	8	4	08220	~~91.76~~	64.23	08220	~~91.76~~	64.23						
8	1.50	17.0	7.7	40	44	80	8	4							08415	~~106.68~~	74.68	08415	~~106.68~~	74.68
8	0.80	17.0	7.7	40	44	80	8	4							08408	~~106.68~~	74.68	08408	~~106.68~~	74.68
8	1.00	17.0	7.7	40	44	80	8	4							08410	~~106.68~~	74.68	08410	~~106.68~~	74.68
8	2.00	17.0	7.7	40	44	80	8	4							08420	~~106.68~~	74.68	08420	~~106.68~~	74.68
10	0.15	22.0	9.7	30	32	72	10	4	10202	~~114.66~~	80.26	10202	~~114.66~~	80.26						
10	0.50	22.0	9.7	30	32	72	10	4	10205	~~114.66~~	80.26	10205	~~114.66~~	80.26						
10	1.00	22.0	9.7	30	32	72	10	4	10210	~~114.66~~	80.26	10210	~~114.66~~	80.26						
10	1.50	22.0	9.7	30	32	72	10	4	10215	~~114.66~~	80.26	10215	~~114.66~~	80.26						
10	2.00	22.0	9.7	30	32	72	10	4	10220	~~114.66~~	80.26	10220	~~114.66~~	80.26						
10	1.50	21.0	9.7	50	54	94	10	4							10415	~~131.95~~	92.37	10415	~~131.95~~	92.37
10	0.50	21.0	9.7	50	54	94	10	4							10405	~~131.95~~	92.37	10405	~~131.95~~	92.37
10	1.00	21.0	9.7	50	54	94	10	4							10410	~~131.95~~	92.37	10410	~~131.95~~	92.37
10	2.00	21.0	9.7	50	54	94	10	4							10420	~~131.95~~	92.37	10420	~~131.95~~	92.37
12	0.20	26.0	11.6	36	38	83	12	4	12202	~~177.01~~	123.91	12202	~~177.01~~	123.91						
12	0.50	26.0	11.6	36	38	83	12	4	12205	~~177.01~~	123.91	12205	~~177.01~~	123.91						
12	1.00	26.0	11.6	36	38	83	12	4	12210	~~177.01~~	123.91	12210	~~177.01~~	123.91						
12	1.50	26.0	11.6	36	38	83	12	4	12215	~~177.01~~	123.91	12215	~~177.01~~	123.91						
12	2.00	26.0	11.6	36	38	83	12	4	12220	~~177.01~~	123.91	12220	~~177.01~~	123.91						
12	3.00	26.0	11.6	36	38	83	12	4	12230	~~177.01~~	123.91	12230	~~177.01~~	123.91						
12	4.00	26.0	11.6	36	38	83	12	4	12240	~~177.01~~	123.91	12240	~~177.01~~	123.91						
12	2.00	25.0	11.6	60	64	109	12	4							12420	~~200.37~~	140.26	12420	~~200.37~~	140.26
12	0.50	25.0	11.6	60	64	109	12	4							12405	~~200.37~~	140.26	12405	~~200.37~~	140.26
12	1.00	25.0	11.6	60	64	109	12	4							12410	~~200.37~~	140.26	12410	~~200.37~~	140.26
12	1.50	25.0	11.6	60	64	109	12	4							12415	~~200.37~~	140.26	12415	~~200.37~~	140.26
12	3.00	25.0	11.6	60	64	109	12	4							12430	~~200.37~~	140.26	12430	~~200.37~~	140.26
12	4.00	25.0	11.6	60	64	109	12	4							12440	~~200.37~~	140.26	12440	~~200.37~~	140.26
14	0.30	26.0	13.6	36	38	83	14	4	14203	~~267.73~~	187.41	14203	~~267.73~~	187.41						
14	1.00	26.0	13.6	36	38	83	14	4	14210	~~267.73~~	187.41	14210	~~267.73~~	187.41						
14	2.00	26.0	13.6	36	38	83	14	4	14220	~~267.73~~	187.41	14220	~~267.73~~	187.41						
14	3.00	26.0	13.6	36	38	83	14	4	14230	~~267.73~~	187.41	14230	~~267.73~~	187.41						
14	4.00	26.0	13.6	36	38	83	14	4	14240	~~267.73~~	187.41	14240	~~267.73~~	187.41						
14	3.00	29.0	13.6	70	74	119	14	4							14430	~~300.27~~	210.19	14430	~~300.27~~	210.19
14	1.00	29.0	13.6	70	74	119	14	4							14410	~~300.27~~	210.19	14410	~~300.27~~	210.19
14	2.00	29.0	13.6	70	74	119	14	4							14420	~~300.27~~	210.19	14420	~~300.27~~	210.19
14	4.00	29.0	13.6	70	74	119	14	4							14440	~~300.27~~	210.19	14440	~~300.27~~	210.19
16	1.00	36.0	15.5	42	44	92	16	4	16210	~~267.73~~	187.41	16210	~~267.73~~	187.41						
16	0.30	36.0	15.5	42	44	92	16	4	16203	~~267.73~~	187.41	16203	~~267.73~~	187.41						
16	2.00	36.0	15.5	42	44	92	16	4	16220	~~267.73~~	187.41	16220	~~267.73~~	187.41						
16	3.00	36.0	15.5	42	44	92	16	4	16230	~~267.73~~	187.41	16230	~~267.73~~	187.41						
16	4.00	36.0	15.5	42	44	92	16	4	16240	~~267.73~~	187.41	16240	~~267.73~~	187.41						
16	3.00	33.0	15.5	80	84	132	16	4							16430	~~329.36~~	230.55	16430	~~329.36~~	230.55
16	1.00	33.0	15.5	80	84	132	16	4							16410	~~329.36~~	230.55	16410	~~329.36~~	230.55
16	2.00	33.0	15.5	80	84	132	16	4							16420	~~329.36~~	230.55	16420	~~329.36~~	230.55
16	4.00	33.0	15.5	80	84	132	16	4							16440	~~329.36~~	230.55	16440	~~329.36~~	230.55
18	1.00	36.0	17.5	42	44	92	18	4	18210	~~356.16~~	249.31	18210	~~356.16~~	249.31						
18	2.00	36.0	17.5	42	44	92	18	4	18220	~~356.16~~	249.31	18220	~~356.16~~	249.31						
18	3.00	36.0	17.5	42	44	92	18	4	18230	~~356.16~~	249.31	18230	~~356.16~~	249.31						
18	4.00	36.0	17.5	42	44	92	18	4	18240	~~356.16~~	249.31	18240	~~356.16~~	249.31						
18	3.00	38.0	17.5	90	94	142	18	4							18430	~~397.30~~	278.11	18430	~~397.30~~	278.11
18	1.00	38.0	17.5	90	94	142	18	4							18410	~~397.30~~	278.11	18410	~~397.30~~	278.11
18	2.00	38.0	17.5	90	94	142	18	4							18420	~~397.30~~	278.11	18420	~~397.30~~	278.11
18	4.00	38.0	17.5	90	94	142	18	4							18440	~~397.30~~	278.11	18440	~~397.30~~	278.11
20	0.30	41.0	19.5	52	54	104	20	4	20203	~~401.03~~	280.72	20203	~~401.03~~	280.72						
20	1.00	41.0	19.5	52	54	104	20	4	20210	~~401.03~~	280.72	20210	~~401.03~~	280.72						
20	2.00	41.0	19.5	52	54	104	20	4	20220	~~401.03~~	280.72	20220	~~401.03~~	280.72						
20	3.00	41.0	19.5	52	54	104	20	4	20230	~~401.03~~	280.72	20230	~~401.03~~	280.72						
20	4.00	41.0	19.5	52	54	104	20	4	20240	~~401.03~~	280.72	20240	~~401.03~~	280.72						
20	3.00	42.0	19.5	100	104	154	20	4							20430	~~446.60~~	312.62	20430	~~446.60~~	312.62
20	1.00	42.0	19.5	100	104	154	20	4							20410	~~446.60~~	312.62	20410	~~446.60~~	312.62
20	2.00	42.0	19.5	100	104	154	20	4							20420	~~446.60~~	312.62	20420	~~446.60~~	312.62
20	4.00	42.0	19.5	100	104	154	20	4							20440	~~446.60~~	312.62	20440	~~446.60~~	312.62

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

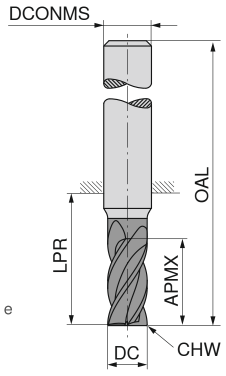
SilverLine – End milling cutter

N

λ_s = 37° 38°
γ_s = 9°

ZEFP

HPC



WNT \ Performance

DPB72S

DRAGONSKIN

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≈DIN 6527 | ≈DIN 6527

HA | HB

DC e8 mm	APMX mm	LPR mm	OAL mm	DCONMS h6 mm	α°	ZEFP	50 993 ... PG V0	£	£	50 995 ... PG V0	£	£
6	10	18	54	6	45	5	06100	~~44.88~~	31.42	06100	~~44.88~~	31.42
8	12	22	58	8	45	5	08100	~~59.65~~	41.76	08100	~~59.65~~	41.76
10	14	26	66	10	45	5	10100	~~77.84~~	54.49	10100	~~77.84~~	54.49
12	16	28	73	12	45	5	12100	~~123.04~~	86.13	12100	~~123.04~~	86.13
16	22	34	82	16	45	5	16100	~~195.26~~	136.68	16100	~~195.26~~	136.68
20	26	42	92	20	45	5	20100	~~301.20~~	210.84	20100	~~301.20~~	210.84

	50 993	50 995
P	●	●
M	●	●
K	●	●
N	○	○
S	●	●
H		
O		

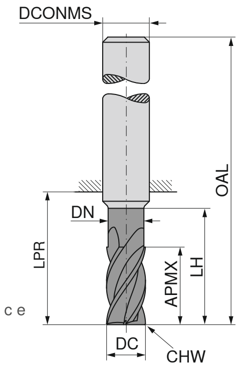
SilverLine – End milling cutter

N

λ_s = 37° 38°
γ_s = 9°

ZEFP

HPC



WNT \ Performance

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DRAGONSKIN

DPB72S

DRAGONSKIN

≈DIN 6527 | ≈DIN 6527

HA | HB

DC e8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	α°	ZEFP	50 994 ... PG V0	£	£	50 996 ... PG V0	£	£
6	13	5.8	19	21	57	6	45	5	06200	~~44.44~~	31.11	06200	~~44.44~~	31.11
8	21	7.7	25	27	63	8	45	5	08200	~~60.64~~	42.45	08200	~~60.64~~	42.45
10	22	9.7	30	32	72	10	45	5	10200	~~88.76~~	62.13	10200	~~88.76~~	62.13
12	26	11.6	36	38	83	12	45	5	12200	~~108.05~~	75.64	12200	~~108.05~~	75.64
16	36	15.5	42	44	92	16	45	5	16200	~~251.04~~	175.73	16200	~~251.04~~	175.73
20	41	19.5	52	54	104	20	45	5	20200	~~343.43~~	240.40	20200	~~343.43~~	240.40

	50 994	50 996
P	●	●
M	●	●
K	●	●
N	○	○
S	●	●
H		
O		

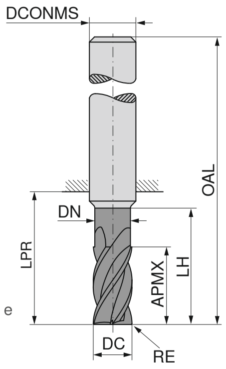
SilverLine – End milling cutter with corner radius

N

λ_s = 37° 38°
γ_s = 9°

ZEFP

HPC



WNT \ Performance

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Factory standard | Factory standard

HA | HB

DC e8 mm	RE ±0,01 mm	APMX mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	50 997 ... PG V0	£	£	50 998 ... PG V0	£	£
6	0.2	13	21	57	6	5	06202	~~63.95~~	44.77	06202	~~63.95~~	44.77
6	0.5	13	21	57	6	5	06205	~~63.95~~	44.77	06205	~~63.95~~	44.77
6	1.0	13	21	57	6	5	06210	~~63.95~~	44.77	06210	~~63.95~~	44.77
8	0.2	21	27	63	8	5	08202	~~80.26~~	56.18	08202	~~80.26~~	56.18
8	0.5	21	27	63	8	5	08205	~~80.26~~	56.18	08205	~~80.26~~	56.18
8	1.0	21	27	63	8	5	08210	~~80.26~~	56.18	08210	~~80.26~~	56.18
8	1.5	21	27	63	8	5	08215	~~80.26~~	56.18	08215	~~80.26~~	56.18
10	0.2	22	32	72	10	5	10202	~~100.22~~	70.15	10202	~~100.22~~	70.15
10	0.5	22	32	72	10	5	10205	~~100.22~~	70.15	10205	~~100.22~~	70.15
10	1.0	22	32	72	10	5	10210	~~100.22~~	70.15	10210	~~100.22~~	70.15
10	1.5	22	32	72	10	5	10215	~~100.22~~	70.15	10215	~~100.22~~	70.15
10	1.6	22	32	72	10	5	10216	~~100.22~~	70.15	10216	~~100.22~~	70.15
10	2.0	22	32	72	10	5	10220	~~100.22~~	70.15	10220	~~100.22~~	70.15
12	0.3	26	38	83	12	5	12203	~~154.79~~	108.35	12203	~~154.79~~	108.35
12	0.5	26	38	83	12	5	12205	~~154.79~~	108.35	12205	~~154.79~~	108.35
12	1.0	26	38	83	12	5	12210	~~154.79~~	108.35	12210	~~154.79~~	108.35
12	1.5	26	38	83	12	5	12215	~~154.79~~	108.35	12215	~~154.79~~	108.35
12	1.6	26	38	83	12	5	12216	~~154.79~~	108.35	12216	~~154.79~~	108.35
12	2.0	26	38	83	12	5	12220	~~154.79~~	108.35	12220	~~154.79~~	108.35
12	2.5	26	38	83	12	5	12225	~~154.79~~	108.35	12225	~~154.79~~	108.35
16	0.3	36	44	92	16	5	16203	~~234.17~~	163.92	16203	~~234.17~~	163.92
16	0.5	36	44	92	16	5	16205	~~234.17~~	163.92	16205	~~234.17~~	163.92
16	1.0	36	44	92	16	5	16210	~~234.17~~	163.92	16210	~~234.17~~	163.92
16	1.5	36	44	92	16	5	16215	~~234.17~~	163.92	16215	~~234.17~~	163.92
16	1.6	36	44	92	16	5	16216	~~234.17~~	163.92	16216	~~234.17~~	163.92
16	2.0	36	44	92	16	5	16220	~~234.17~~	163.92	16220	~~234.17~~	163.92
16	2.5	36	44	92	16	5	16225	~~234.17~~	163.92	16225	~~234.17~~	163.92
16	3.0	36	44	92	16	5	16230	~~234.17~~	163.92	16230	~~234.17~~	163.92
20	0.3	41	54	104	20	5	20203	~~350.71~~	245.50	20203	~~350.71~~	245.50
20	0.5	41	54	104	20	5	20205	~~350.71~~	245.50	20205	~~350.71~~	245.50
20	1.0	41	54	104	20	5	20210	~~350.71~~	245.50	20210	~~350.71~~	245.50
20	1.5	41	54	104	20	5	20215	~~350.71~~	245.50	20215	~~350.71~~	245.50
20	1.6	41	54	104	20	5	20216	~~350.71~~	245.50	20216	~~350.71~~	245.50
20	2.0	41	54	104	20	5	20220	~~350.71~~	245.50	20220	~~350.71~~	245.50
20	2.5	41	54	104	20	5	20225	~~350.71~~	245.50	20225	~~350.71~~	245.50
20	3.0	41	54	104	20	5	20230	~~350.71~~	245.50	20230	~~350.71~~	245.50
20	4.0	41	54	104	20	5	20240	~~350.71~~	245.50	20240	~~350.71~~	245.50

	50 997	50 998
P	●	●
M	●	●
K	●	●
N	○	○
S	●	●
H		
O		

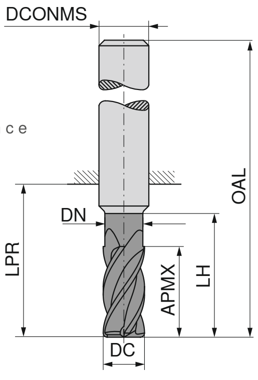
SilverLine – High Accuracy Finish Milling Cutter

▲ max. taper of 0.005 mm for high precision and parallelism of vertical walls
▲ Tool with cutting edge correction

N

λ_s = 48° 50°
γ_s = 13°

ZEFP



WNT \ Performance

DPB72S

DRAGONSKIN

DPB72S

DRAGONSKIN

≈DIN 6527 | Factory standard

HA | HA

DC f8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h5 mm	ZEFP	50 991 ... PG V0	£	£	50 991 ... PG V0	£	£
6	13	5.6	19	21	57	6	6	06700	~~81.44~~	57.01			
6	10	5.8	18	22	58	6	6	06200	~~81.49~~	57.04			
6	13	5.8	27	31	67	6	6				06400	~~110.49~~	77.34
6	13	5.8	36	40	76	6	6				06900	~~138.02~~	96.61
6	15	5.6	42	44	80	6	6				90000	~~110.45~~	77.32
8	19	7.6	25	27	63	8	6	08700	~~93.54~~	65.48			
8	13	7.7	24	28	64	8	6	08200	~~93.21~~	65.25			
8	17	7.7	36	40	76	8	6				08400	~~136.68~~	95.68
8	17	7.7	48	53	89	8	6				08900	~~170.85~~	119.60
8	20	7.6	62	64	100	8	6				90100	~~136.50~~	95.55
10	22	9.6	30	32	72	10	6	10700	~~160.24~~	112.17			
10	16	9.7	30	34	74	10	6	10200	~~160.67~~	112.47			
10	21	9.7	45	49	89	10	6				10400	~~204.81~~	143.37
10	25	9.6	58	60	100	10	6				10900	~~204.24~~	142.97
10	21	9.7	60	64	104	10	6				90200	~~255.98~~	179.19
12	26	11.5	36	38	83	12	6	12700	~~217.14~~	152.00			
12	19	11.6	36	40	85	12	6	12200	~~217.71~~	152.40			
12	25	11.6	54	58	103	12	6				12400	~~317.04~~	221.93
12	30	11.5	73	75	120	12	6				12900	~~316.61~~	221.63
12	25	11.6	72	76	121	12	6				90300	~~396.15~~	277.31
16	32	15.0	42	44	92	16	6	16700	~~404.89~~	283.42			
16	25	15.5	48	52	100	16	6	16200	~~405.04~~	283.53			
16	33	15.5	72	76	124	16	6				16400	~~557.96~~	390.57
16	33	15.5	96	100	148	16	6				16900	~~697.42~~	488.19
16	40	15.0	100	102	150	16	6				90400	~~557.39~~	390.17
20	38	19.0	52	54	104	20	6	20700	~~583.34~~	408.34			
20	32	19.5	60	64	114	20	6	20200	~~583.62~~	408.53			
20	42	19.5	90	94	144	20	6				20400	~~768.37~~	537.86
20	50	19.0	98	100	150	20	6				20900	~~768.08~~	537.66
20	42	19.5	120	124	174	20	6				90500	~~960.42~~	672.29
25	40	24.5	75	80	136	25	6	25200	~~730.96~~	511.67			
25	52	24.5	113	118	174	25	6				25400	~~961.42~~	672.99
25	52	24.5	150	154	210	25	6				25900	~~1,201.78~~	841.25

	50 991	50 991
P	●	●
M	●	●
K	○	○
N	○	○
S	●	●
H		
O		

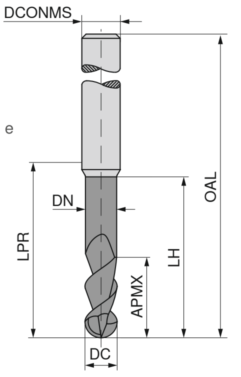
SilverLine – Ball Nosed Cutter

N

λs=30°
γs= 6°

ZEFP

WNT \ Performance



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DC f8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	Factory standard HA 50 963 ... PG V0	£	£	Factory standard HA 50 963 ... PG V0	£	£
3	4	2.8	10.0	14	50	6	2	**03115**	~~69.54~~	48.68			
3	7	3.0	8.8	24	60	6	2				**03415**	~~93.29~~	65.30
4	8	3.8	12.0	18	54	6	2	**04120**	~~69.54~~	48.68			
4	10	4.0	12.5	39	75	6	2				**04420**	~~93.29~~	65.30
5	9	4.8	16.0	18	54	6	2	**05125**	~~69.54~~	48.68			
5	12	5.0	15.0	39	75	6	2				**05425**	~~97.03~~	67.92
6	10	5.7	16.0	18	54	6	2	**06130**	~~69.54~~	48.68			
6	12	6.0	15.0	64	100	6	2				**06430**	~~112.36~~	78.65
7	11	6.6	20.0	22	58	8	2	**07135**	~~84.65~~	59.26			
8	12	7.6	20.0	22	58	8	2	**08140**	~~84.65~~	59.26			
8	14	8.0	17.5	64	100	8	2				**08440**	~~131.34~~	91.94
10	14	9.6	24.0	26	66	10	2	**10150**	~~105.85~~	74.10			
10	18	10.0	22.5	60	100	10	2				**10450**	~~178.58~~	125.01
12	16	11.5	26.0	28	73	12	2	**12160**	~~153.78~~	107.65			
12	22	12.0	27.5	55	100	12	2				**12460**	~~230.33~~	161.23
14	18	13.3	28.0	30	75	14	2	**14170**	~~178.58~~	125.01			
14	26	14.0	32.5	75	120	14	2				**14470**	~~367.34~~	257.14
16	22	15.2	32.0	34	82	16	2	**16180**	~~226.60~~	158.62			
16	30	16.0	37.5	102	150	16	2				**16480**	~~494.90~~	346.43
18	24	17.1	34.0	36	84	18	2	**18190**	~~373.36~~	261.35			
20	26	19.0	40.0	42	92	20	2	**20110**	~~373.36~~	261.35			
20	38	20.0	47.5	100	150	20	2				**20410**	~~655.85~~	459.10

	50 963 ...	50 963 ...
P	●	●
M		
K	●	●
N	○	○
S		
H	○	○
O		

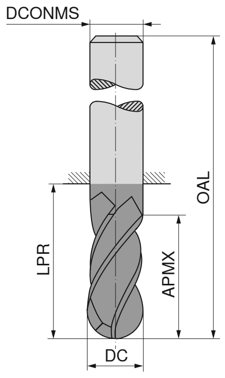
SilverLine – Ball Nosed Cutter

N

λs=35°
38°
γs= 7°

ZEFP

WNT \ Performance



DPB72S

DRAGONSKIN

DC f8 mm	APMX mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	Factory standard HA 50 990 ... PG V0	£	£
4	11	21	57	6	4	**04220**	~~67.70~~	47.39
5	13	21	57	6	4	**05225**	~~67.70~~	47.39
6	13	21	57	6	4	**06230**	~~79.21~~	55.45
8	19	36	72	8	4	**08280**	~~98.14~~	68.70
10	22	32	72	10	4	**10250**	~~123.91~~	86.74
12	26	38	83	12	4	**12260**	~~196.07~~	137.25
16	32	44	92	16	4	**16280**	~~289.37~~	202.56
20	38	54	104	20	4	**20210**	~~419.37~~	293.56

	50 990 ...
P	●
M	○
K	●
N	○
S	
H	
O	

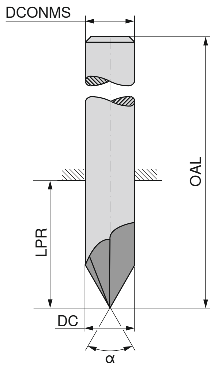
SilverLine – NC deburring cutter

▲ High performance 5 flute chamfering tool

N

λs=0°
γs=5°

WNT \ Performance



DPB72S

DRAGONSKIN

DPB72S

DRAGONSKIN

DPB72S

DRAGONSKIN

DPB72S

DRAGONSKIN

DC h6 mm	OAL mm	LPR mm	DCONMS h6 mm	ZEFP	α = 60° Factory standard HA 50 562 ... PG V1	£	£	α = 60° Factory standard HB 50 563 ... PG V1	£	£	α = 90° Factory standard HA 50 560 ... PG V1	£	£	α = 90° Factory standard HB 50 561 ... PG V1	£	£
4	50	22	4	5	**04000**	~~39.31~~	25.55				**04000**	~~39.31~~	25.55			
6	55	19	6	5	**06000**	~~43.21~~	28.09	**06000**	~~43.21~~	28.09	**06000**	~~43.21~~	28.09	**06000**	~~43.21~~	28.09
8	58	22	8	5	**08000**	~~56.29~~	36.59	**08000**	~~56.29~~	36.59	**08000**	~~56.29~~	36.59	**08000**	~~56.29~~	36.59
10	60	20	10	5	**10000**	~~66.93~~	43.50	**10000**	~~66.93~~	43.50	**10000**	~~66.93~~	43.50	**10000**	~~66.93~~	43.50
12	70	25	12	5	**12000**	~~85.51~~	55.58	**12000**	~~85.51~~	55.58	**12000**	~~85.51~~	55.58	**12000**	~~85.51~~	55.58
16	80	32	16	5	**16000**	~~133.13~~	86.53	**16000**	~~133.13~~	86.53	**16000**	~~133.13~~	86.53	**16000**	~~133.13~~	86.53

	50 562 ...	50 563 ...	50 560 ...	50 561 ...
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
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S	●	●	●	●
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AluLine

With optimised coating and geometry for the effective machining of aluminium and non-ferrous metals

First Choice for high performance Aluminium Milling

Solid carbide milling tools from CERATIZIT ensure you always do a good job: We have added milling tools for machining aluminium and non-ferrous metals to our product portfolio. This means you will now be able to find the ideal product for any application.

This AluLine milling cutter allows you to master even the toughest demands when working with aluminium and non-ferrous metals. This is all made possible thanks to the special geometry and the specifically tailored coating.

Advantages/benefits

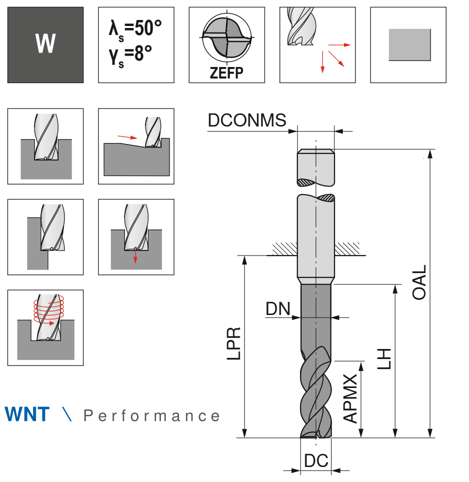
- **Economical and process-secure machining of aluminium and non-ferrous metals.** Optimal performance thanks to the perfectly coordinated combination of geometry, substrate and coating.
- **Optimal/versatile tool selection for almost all applications in the machining of non-ferrous metals** The product portfolio has increased in size following the program extension and now offers access to around 2500 items.
- **Extremely long tool service life possible** Thanks to the wear-resistant DLC coating.

> ”
> Our AluLine milling cutter impresses with its outstanding coating. It achieves first-rate results even in dry machining.
>
> Product Manager CERATIZIT, Michael Wucher

ⓘ Cutting datas can be found in our main catalogue, Chapter 14 Solid Carbide milling cutters on page 390–394

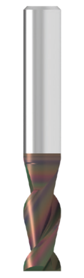
AluLine – End milling cutter

▲ With polished chip flutes

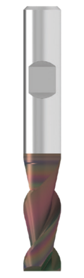


WNT \ Performance

DLC
DRAGONSKIN



DLC
DRAGONSKIN



								Factory standard HA			Factory standard HB		
DC h6	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	**53 625 ...**	PG V1		**53 626 ...**	PG V1	
mm	mm	mm	mm	mm	mm	mm			£	£		£	£
5.0	10.5	4.8	15	22	58	6	2	**05100**	~~54.40~~	35.36	**05100**	~~54.40~~	35.36
5.5	13.0	5.3	18	22	58	6	2	**05600**	~~63.66~~	41.38	**05600**	~~63.66~~	41.38
6.0	13.0	5.8	18	22	58	6	2	**06100**	~~61.34~~	39.87	**06100**	~~61.34~~	39.87
6.5	17.0	6.2	24	28	64	8	2	**06600**	~~68.29~~	44.39	**06600**	~~68.29~~	44.39
7.0	17.0	6.7	24	28	64	8	2	**07100**	~~67.13~~	43.63	**07100**	~~67.13~~	43.63
7.5	17.0	7.2	24	28	64	8	2	**07600**	~~65.97~~	42.88	**07600**	~~65.97~~	42.88
8.0	17.0	7.7	24	28	64	8	2	**08100**	~~64.82~~	42.13	**08100**	~~64.82~~	42.13
8.5	21.0	8.2	30	34	74	10	2	**08600**	~~100.70~~	65.46	**08600**	~~100.70~~	65.46
9.0	21.0	8.7	30	34	74	10	2	**09100**	~~98.37~~	63.94	**09100**	~~98.37~~	63.94
9.5	21.0	9.2	30	34	74	10	2	**09600**	~~96.06~~	62.44	**09600**	~~96.06~~	62.44
10.0	21.0	9.7	30	34	74	10	2	**10100**	~~93.74~~	60.93	**10100**	~~93.74~~	60.93
10.5	25.0	10.1	36	40	85	12	2	**10600**	~~134.26~~	87.27	**10600**	~~134.26~~	87.27
11.0	25.0	10.6	36	40	85	12	2	**11100**	~~131.94~~	85.76	**11100**	~~131.94~~	85.76
11.5	25.0	11.1	36	40	85	12	2	**11600**	~~128.48~~	83.51	**11600**	~~128.48~~	83.51
12.0	25.0	11.6	36	40	85	12	2	**12100**	~~131.94~~	85.76	**12100**	~~131.94~~	85.76
12.5	29.0	12.1	42	46	91	14	2				**12600**	~~180.56~~	117.36
13.0	29.0	12.6	42	46	91	14	2				**13100**	~~179.40~~	116.61
13.5	29.0	13.1	42	46	91	14	2				**13600**	~~178.24~~	115.86
14.0	29.0	13.6	42	46	91	14	2				**14100**	~~187.50~~	121.88
14.5	33.0	14.0	48	52	100	16	2				**14600**	~~245.37~~	159.49
15.0	33.0	14.5	48	52	100	16	2				**15100**	~~240.74~~	156.48
15.5	33.0	15.0	48	52	100	16	2				**15600**	~~234.96~~	152.72
16.0	33.0	15.5	48	52	100	16	2				**16100**	~~251.16~~	163.25
16.5	38.0	16.0	54	58	106	18	2				**16600**	~~314.82~~	204.63
17.0	38.0	16.5	54	58	106	18	2				**17100**	~~306.72~~	199.37
17.5	38.0	17.0	54	58	106	18	2				**17600**	~~298.61~~	194.10
18.0	38.0	17.5	54	58	106	18	2				**18100**	~~298.61~~	194.10
18.5	42.0	18.0	60	64	114	20	2				**18600**	~~383.09~~	249.01
19.0	42.0	18.5	60	64	114	20	2				**19100**	~~373.84~~	243.00
19.5	42.0	19.0	60	64	114	20	2				**19600**	~~364.58~~	236.98
20.0	42.0	19.5	60	64	114	20	2				**20100**	~~368.06~~	239.24

	53 625 ...	53 626 ...
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S		
H		
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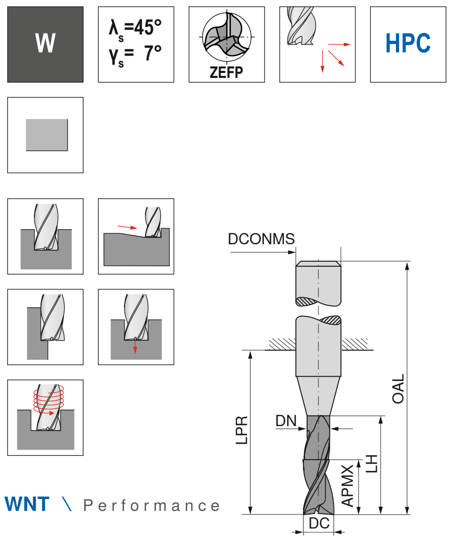
AluLine – End milling cutter

▲ With polished chip flutes



WNT \ Performance

DLC
DRAGONSKIN

DLC
DRAGONSKIN

								Factory standard HA			Factory standard HB		
DC h6	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	**53 617 ...**	PG V1		**53 618 ...**	PG V1	
mm	mm	mm	mm	mm	mm	mm			£	£		£	£
2.0	4.5	1.8	6.0	14	50	6	3	**02100**	~~50.93~~	33.10	**02100**	~~50.93~~	33.10
2.5	5.5	2.3	7.5	19	55	6	3	**02600**	~~49.77~~	32.35	**02600**	~~49.77~~	32.35
3.0	6.5	2.8	9.0	19	55	6	3	**03100**	~~50.93~~	33.10	**03100**	~~50.93~~	33.10
3.5	8.5	3.3	12.0	19	55	6	3	**03600**	~~53.24~~	34.61	**03600**	~~53.24~~	34.61
4.0	8.5	3.8	12.0	19	55	6	3	**04100**	~~53.24~~	34.61	**04100**	~~53.24~~	34.61
4.5	10.5	4.3	15.0	22	58	6	3	**04600**	~~64.82~~	42.13	**04600**	~~64.82~~	42.13
5.0	10.5	4.8	15.0	22	58	6	3	**05100**	~~57.87~~	37.62	**05100**	~~57.87~~	37.62
5.5	13.0	5.3	18.0	22	58	6	3	**05600**	~~65.97~~	42.88	**05600**	~~65.97~~	42.88
6.0	13.0	5.8	18.0	22	58	6	3	**06100**	~~61.34~~	39.87	**06100**	~~61.34~~	39.87
6.5	17.0	6.2	24.0	28	64	8	3	**06600**	~~71.76~~	46.64	**06600**	~~71.76~~	46.64
7.0	17.0	6.7	24.0	28	64	8	3	**07100**	~~69.45~~	45.14	**07100**	~~69.45~~	45.14
7.5	17.0	7.2	24.0	28	64	8	3	**07600**	~~68.29~~	44.39	**07600**	~~68.29~~	44.39
8.0	17.0	7.7	24.0	28	64	8	3	**08100**	~~67.13~~	43.63	**08100**	~~67.13~~	43.63
8.5	21.0	8.2	30.0	34	74	10	3	**08600**	~~104.16~~	67.70	**08600**	~~104.16~~	67.70
9.0	21.0	8.7	30.0	34	74	10	3	**09100**	~~101.85~~	66.20	**09100**	~~101.85~~	66.20
9.5	21.0	9.2	30.0	34	74	10	3	**09600**	~~99.53~~	64.69	**09600**	~~99.53~~	64.69
10.0	21.0	9.7	30.0	34	74	10	3	**10100**	~~97.22~~	63.19	**10100**	~~97.22~~	63.19
10.5	25.0	10.1	36.0	40	85	12	3	**10600**	~~140.05~~	91.03	**10600**	~~140.05~~	91.03
11.0	25.0	10.6	36.0	40	85	12	3	**11100**	~~137.74~~	89.53	**11100**	~~137.74~~	89.53
11.5	25.0	11.1	36.0	40	85	12	3	**11600**	~~133.11~~	86.52	**11600**	~~133.11~~	86.52
12.0	25.0	11.6	36.0	40	85	12	3	**12100**	~~137.74~~	89.53	**12100**	~~137.74~~	89.53
12.5	29.0	12.1	42.0	46	91	14	3				**12600**	~~180.56~~	117.36
13.0	29.0	12.6	42.0	46	91	14	3				**13100**	~~179.40~~	116.61
13.5	29.0	13.1	42.0	46	91	14	3				**13600**	~~178.24~~	115.86
14.0	29.0	13.6	42.0	46	91	14	3				**14100**	~~187.50~~	121.88
14.5	33.0	14.0	48.0	52	100	16	3				**14600**	~~245.37~~	159.49
15.0	33.0	14.5	48.0	52	100	16	3				**15100**	~~240.74~~	156.48
15.5	33.0	15.0	48.0	52	100	16	3				**15600**	~~234.96~~	152.72
16.0	33.0	15.5	48.0	52	100	16	3				**16100**	~~251.16~~	163.25
16.5	38.0	16.0	54.0	58	106	18	3				**16600**	~~314.82~~	204.63
17.0	38.0	16.5	54.0	58	106	18	3				**17100**	~~306.72~~	199.37
17.5	38.0	17.0	54.0	58	106	18	3				**17600**	~~298.61~~	194.10
18.0	38.0	17.5	54.0	58	106	18	3				**18100**	~~298.61~~	194.10
18.5	42.0	18.0	60.0	64	114	20	3				**18600**	~~383.09~~	249.01
19.0	42.0	18.5	60.0	64	114	20	3				**19100**	~~373.84~~	243.00
19.5	42.0	19.0	60.0	64	114	20	3				**19600**	~~364.58~~	236.98
20.0	42.0	19.5	60.0	64	114	20	3				**20100**	~~368.06~~	239.24

	53 617 ...	53 618 ...
P		
M		
K		
N	●	●
S		
H		
O		

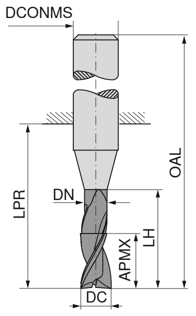
AluLine – End milling cutter

▲ With polished chip flutes

W

λ_s=45°
γ_s= 7°

ZEFP



WNT \ Performance

DLC

DRAGONSKIN

Factory standard

HA

DLC

DRAGONSKIN

Factory standard

HB

DC h6	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	53 617 ... PG V1			53 618 ... PG V1		
mm	mm	mm	mm	mm	mm	mm			£	£		£	£
2.0	5.5	1.8	10.0	19	55	6	3	**02200**	~~57.87~~	37.62	**02200**	~~57.87~~	37.62
2.5	6.5	2.3	12.5	22	58	6	3	**02700**	~~57.87~~	37.62	**02700**	~~57.87~~	37.62
3.0	8.0	2.8	15.0	22	58	6	3	**03200**	~~59.03~~	38.37	**03200**	~~59.03~~	38.37
3.5	10.5	3.3	20.0	26	62	6	3	**03700**	~~61.34~~	39.87	**03700**	~~61.34~~	39.87
4.0	10.5	3.8	20.0	26	62	6	3	**04200**	~~62.50~~	40.63	**04200**	~~62.50~~	40.63
4.5	13.0	4.3	25.0	34	70	6	3	**04700**	~~75.23~~	48.90	**04700**	~~75.23~~	48.90
5.0	13.0	4.8	25.0	34	70	6	3	**05200**	~~68.29~~	44.39	**05200**	~~68.29~~	44.39
5.5	16.0	5.3	30.0	34	70	6	3	**05700**	~~77.55~~	50.41	**05700**	~~77.55~~	50.41
6.0	16.0	5.8	30.0	34	70	6	3	**06200**	~~70.60~~	45.89	**06200**	~~70.60~~	45.89
6.5	21.0	6.2	40.0	44	80	8	3	**06700**	~~83.34~~	54.17	**06700**	~~83.34~~	54.17
7.0	21.0	6.7	40.0	44	80	8	3	**07200**	~~81.02~~	52.66	**07200**	~~81.02~~	52.66
7.5	21.0	7.2	40.0	44	80	8	3	**07700**	~~79.86~~	51.91	**07700**	~~79.86~~	51.91
8.0	21.0	7.7	40.0	44	80	8	3	**08200**	~~77.55~~	50.41	**08200**	~~77.55~~	50.41
8.5	26.0	8.2	50.0	54	94	10	3	**08700**	~~122.68~~	79.74	**08700**	~~122.68~~	79.74
9.0	26.0	8.7	50.0	54	94	10	3	**09200**	~~119.22~~	77.49	**09200**	~~119.22~~	77.49
9.5	26.0	9.2	50.0	54	94	10	3	**09700**	~~116.90~~	75.99	**09700**	~~116.90~~	75.99
10.0	26.0	9.7	50.0	54	94	10	3	**10200**	~~113.42~~	73.72	**10200**	~~113.42~~	73.72
10.5	31.0	10.1	60.0	64	109	12	3	**10700**	~~165.51~~	107.58	**10700**	~~165.51~~	107.58
11.0	31.0	10.6	60.0	64	109	12	3	**11200**	~~160.88~~	104.57	**11200**	~~160.88~~	104.57
11.5	31.0	11.1	60.0	64	109	12	3	**11700**	~~157.41~~	102.32	**11700**	~~157.41~~	102.32
12.0	31.0	11.6	60.0	64	109	12	3	**12200**	~~160.88~~	104.57	**12200**	~~160.88~~	104.57
12.5	36.0	12.1	70.0	74	119	14	3				**12700**	~~211.81~~	137.68
13.0	36.0	12.6	70.0	74	119	14	3				**13200**	~~210.64~~	136.92
13.5	36.0	13.1	70.0	74	119	14	3				**13700**	~~209.49~~	136.17
14.0	36.0	13.6	70.0	74	119	14	3				**14200**	~~218.75~~	142.19
14.5	41.0	14.0	80.0	84	132	16	3				**14700**	~~288.19~~	187.32
15.0	41.0	14.5	80.0	84	132	16	3				**15200**	~~282.41~~	183.57
15.5	41.0	15.0	80.0	84	132	16	3				**15700**	~~276.62~~	179.80
16.0	41.0	15.5	80.0	84	132	16	3				**16200**	~~293.98~~	191.09
16.5	47.0	16.0	90.0	94	142	18	3				**16700**	~~370.38~~	240.75
17.0	47.0	16.5	90.0	94	142	18	3				**17200**	~~361.12~~	234.73
17.5	47.0	17.0	90.0	94	142	18	3				**17700**	~~351.86~~	228.71
18.0	47.0	17.5	90.0	94	142	18	3				**18200**	~~350.69~~	227.95
18.5	52.0	18.0	100.0	104	154	20	3				**18700**	~~487.27~~	316.73
19.0	52.0	18.5	100.0	104	154	20	3				**19200**	~~474.54~~	308.45
19.5	52.0	19.0	100.0	104	154	20	3				**19700**	~~461.80~~	300.17
20.0	52.0	19.5	100.0	104	154	20	3				**20200**	~~464.12~~	301.68

	53 617 ...	53 618 ...
P		
M		
K		
N	●	●
S		
H		
O		

AluLine – End milling cutter with corner radius

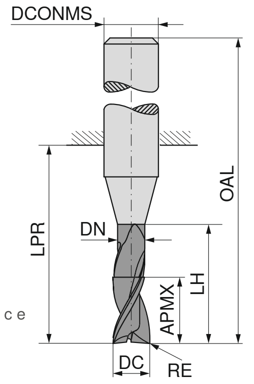
▲ With polished chip flutes

W

λ_s=45°
γ_s= 7°

ZEFP

HPC



WNT \ Performance

DLC

DRAGONSKIN

Factory standard

HA

DLC

DRAGONSKIN

Factory standard

HB

DC h6	RE ±0,05	APMX	DN	LH	LPR	OAL	DCONMS h6	ZEFP	53 710 ... PG V1			53 711 ... PG V1		
mm	mm	mm	mm	mm	mm	mm	mm			£	£		£	£
2	0.5	4.5	1.8	6	14	50	6	3	**02105**	~~52.08~~	33.85	**02105**	~~52.08~~	33.85
2	0.3	4.5	1.8	6	14	50	6	3	**02103**	~~52.08~~	33.85	**02103**	~~52.08~~	33.85
3	1.0	6.5	2.7	9	19	55	6	3	**03110**	~~53.24~~	34.61	**03110**	~~53.24~~	34.61
3	0.3	6.5	2.7	9	19	55	6	3	**03103**	~~53.24~~	34.61	**03103**	~~53.24~~	34.61
3	0.5	6.5	2.7	9	19	55	6	3	**03105**	~~53.24~~	34.61	**03105**	~~53.24~~	34.61
4	0.5	8.5	3.7	12	19	55	6	3	**04105**	~~56.71~~	36.86	**04105**	~~56.71~~	36.86
4	0.3	8.5	3.7	12	19	55	6	3	**04103**	~~56.71~~	36.86	**04103**	~~56.71~~	36.86
4	1.0	8.5	3.7	12	19	55	6	3	**04110**	~~56.71~~	36.86	**04110**	~~56.71~~	36.86
5	1.0	10.5	4.7	15	22	58	6	3	**05110**	~~62.50~~	40.63	**05110**	~~61.34~~	39.87
5	0.3	10.5	4.7	15	22	58	6	3	**05103**	~~62.50~~	40.63	**05103**	~~61.34~~	39.87
5	0.5	10.5	4.7	15	22	58	6	3	**05105**	~~62.50~~	40.63	**05105**	~~61.34~~	39.87
6	1.0	13.0	5.7	18	22	58	6	3	**06110**	~~64.82~~	42.13	**06110**	~~64.82~~	42.13
6	0.3	13.0	5.7	18	22	58	6	3	**06103**	~~64.82~~	42.13	**06103**	~~64.82~~	42.13
6	0.5	13.0	5.7	18	22	58	6	3	**06105**	~~64.82~~	42.13	**06105**	~~64.82~~	42.13
6	1.5	13.0	5.7	18	22	58	6	3	**06115**	~~64.82~~	42.13	**06115**	~~64.82~~	42.13
8	0.3	17.0	7.4	24	28	64	8	3	**08103**	~~70.60~~	45.89	**08103**	~~70.60~~	45.89
8	0.5	17.0	7.4	24	28	64	8	3	**08105**	~~70.60~~	45.89	**08105**	~~70.60~~	45.89
8	1.0	17.0	7.4	24	28	64	8	3	**08110**	~~70.60~~	45.89	**08110**	~~70.60~~	45.89
8	1.5	17.0	7.4	24	28	64	8	3	**08115**	~~70.60~~	45.89	**08115**	~~70.60~~	45.89
8	2.0	17.0	7.4	24	28	64	8	3	**08120**	~~70.60~~	45.89	**08120**	~~70.60~~	45.89
10	1.5	21.0	9.2	30	34	74	10	3	**10115**	~~103.01~~	66.96	**10115**	~~103.01~~	66.96
10	0.3	21.0	9.2	30	34	74	10	3	**10103**	~~103.01~~	66.96	**10103**	~~103.01~~	66.96
10	0.5	21.0	9.2	30	34	74	10	3	**10105**	~~103.01~~	66.96	**10105**	~~103.01~~	66.96
10	1.0	21.0	9.2	30	34	74	10	3	**10110**	~~103.01~~	66.96	**10110**	~~103.01~~	66.96
10	2.0	21.0	9.2	30	34	74	10	3	**10120**	~~103.01~~	66.96	**10120**	~~103.01~~	66.96
10	3.0	21.0	9.2	30	34	74	10	3	**10130**	~~103.01~~	66.96	**10130**	~~103.01~~	66.96
12	1.5	25.0	11.0	36	40	85	12	3	**12115**	~~145.82~~	94.78	**12115**	~~145.82~~	94.78
12	0.3	25.0	11.0	36	40	85	12	3	**12103**	~~145.82~~	94.78	**12103**	~~145.82~~	94.78
12	0.5	25.0	11.0	36	40	85	12	3	**12105**	~~145.82~~	94.78	**12105**	~~145.82~~	94.78
12	1.0	25.0	11.0	36	40	85	12	3	**12110**	~~145.82~~	94.78	**12110**	~~145.82~~	94.78
12	2.0	25.0	11.0	36	40	85	12	3	**12120**	~~145.82~~	94.78	**12120**	~~145.82~~	94.78
12	3.0	25.0	11.0	36	40	85	12	3	**12130**	~~145.82~~	94.78	**12130**	~~145.82~~	94.78
12	4.0	25.0	11.0	36	40	85	12	3	**12140**	~~145.82~~	94.78	**12140**	~~145.82~~	94.78
16	1.5	33.0	15.0	48	52	100	16	3				**16115**	~~232.64~~	151.22
16	0.3	33.0	15.0	48	52	100	16	3				**16103**	~~232.64~~	151.22
16	0.5	33.0	15.0	48	52	100	16	3				**16105**	~~232.64~~	151.22
16	1.0	33.0	15.0	48	52	100	16	3				**16110**	~~232.64~~	151.22
16	2.0	33.0	15.0	48	52	100	16	3				**16120**	~~232.64~~	151.22
16	3.0	33.0	15.0	48	52	100	16	3				**16130**	~~232.64~~	151.22
16	4.0	33.0	15.0	48	52	100	16	3				**16140**	~~232.64~~	151.22
20	2.0	42.0	19.0	60	64	114	20	3				**20120**	~~359.95~~	233.97
20	0.5	42.0	19.0	60	64	114	20	3				**20105**	~~359.95~~	233.97
20	1.0	42.0	19.0	60	64	114	20	3				**20110**	~~359.95~~	233.97
20	1.5	42.0	19.0	60	64	114	20	3				**20115**	~~359.95~~	233.97
20	3.0	42.0	19.0	60	64	114	20	3				**20130**	~~359.95~~	233.97
20	4.0	42.0	19.0	60	64	114	20	3				**20140**	~~359.95~~	233.97

	53 710 ...	53 711 ...
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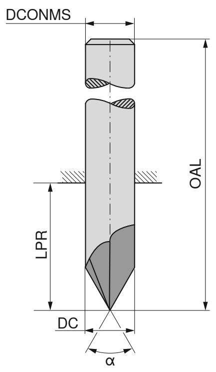
AluLine – NC deburring cutter

W

λ_s=0°
γ_s=8°



WNT \ Performance

DLC

DRAGONSKIN

α = 60°

Factory standard

HA

DLC

DRAGONSKIN

α = 60°

Factory standard

HB

DLC

DRAGONSKIN

α = 90°

Factory standard

HA

DLC

DRAGONSKIN

α = 90°

Factory standard

HB

DC h6	OAL	LPR	DCONMS h6	ZEFP	53 662 ... PG V1			53 663 ... PG V1			53 660 ... PG V1			53 661 ... PG V1		
mm	mm	mm	mm			£	£		£	£		£	£		£	£
4	50	22	4	4	**04000**	~~37.33~~	24.26				**04000**	~~37.33~~	24.26			
6	55	19	6	4	**06000**	~~41.03~~	26.67	**06000**	~~41.03~~	26.67	**06000**	~~41.03~~	26.67	**06000**	~~41.03~~	26.67
8	58	22	8	4	**08000**	~~47.72~~	31.02	**08000**	~~47.72~~	31.02	**08000**	~~47.72~~	31.02	**08000**	~~47.72~~	31.02
10	60	20	10	4	**10000**	~~66.10~~	42.97	**10000**	~~66.10~~	42.97	**10000**	~~66.10~~	42.97	**10000**	~~66.10~~	42.97
12	70	25	12	4	**12000**	~~74.55~~	48.46	**12000**	~~74.55~~	48.46	**12000**	~~74.55~~	48.46	**12000**	~~74.55~~	48.46
16	80	32	16	4	**16000**	~~121.50~~	78.98	**16000**	~~121.50~~	78.98	**16000**	~~121.50~~	78.98	**16000**	~~121.50~~	78.98

	53 662 ...	53 663 ...	53 660 ...	53 661 ...
P				
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O	●	●	●	●

CircularLine


Universal tool with 5 or 6 flutes for smooth operation and high material removal rate

Tools with chip breakers for optimum chip removal

DRAGONSKIN

CircularLine – End milling cutter with corner radius

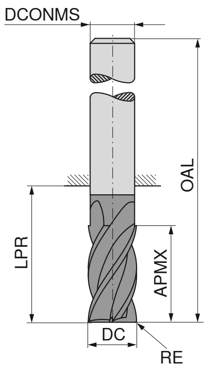
- ▲ Chip breaker 0.9 x DC
- ▲ Cutting depth: 5 x DC

CCR UNI | λ_s = 35° 36° γ_s = 9° | ZEFP | HPC

WNT \ Performance

DPX72S

DRAGONSKIN



Factory standard

HB

DC e8 mm	RE ±0,05 mm	APMX mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	53 593 ...	£	PG V1 £
6	0.2	31	39	75	6	5	06402	~~87.85~~	57.10
6	1.0	31	39	75	6	5	06410	~~87.85~~	57.10
6	1.5	31	39	75	6	5	06415	~~87.85~~	57.10
8	0.2	41	49	85	8	5	08402	~~101.27~~	65.83
8	1.0	41	49	85	8	5	08410	~~101.27~~	65.83
8	1.5	41	49	85	8	5	08415	~~101.27~~	65.83
8	2.0	41	49	85	8	5	08420	~~101.27~~	65.83
10	0.2	51	60	100	10	5	10402	~~139.83~~	90.89
10	1.0	51	60	100	10	5	10410	~~139.83~~	90.89
10	1.5	51	60	100	10	5	10415	~~139.83~~	90.89
10	1.6	51	60	100	10	5	10416	~~139.83~~	90.89
10	2.0	51	60	100	10	5	10420	~~139.83~~	90.89
12	0.2	61	70	115	12	5	12402	~~173.32~~	112.66
12	1.0	61	70	115	12	5	12410	~~173.32~~	112.66
12	1.5	61	70	115	12	5	12415	~~173.32~~	112.66
12	1.6	61	70	115	12	5	12416	~~173.32~~	112.66
12	2.0	61	70	115	12	5	12420	~~173.32~~	112.66
12	3.0	61	70	115	12	5	12430	~~173.32~~	112.66
14	0.2	71	81	126	14	5	14402	~~173.32~~	112.66
14	1.0	71	81	126	14	5	14410	~~356.02~~	231.41
14	1.5	71	81	126	14	5	14415	~~356.02~~	231.41
14	1.6	71	81	126	14	5	14416	~~356.02~~	231.41
14	2.0	71	81	126	14	5	14420	~~356.02~~	231.41
14	3.0	71	81	126	14	5	14430	~~356.02~~	231.41
16	0.2	81	92	140	16	5	16402	~~352.21~~	228.94
16	1.0	81	92	140	16	5	16410	~~352.21~~	228.94
16	1.5	81	92	140	16	5	16415	~~352.21~~	228.94
16	1.6	81	92	140	16	5	16416	~~352.21~~	228.94
16	2.0	81	92	140	16	5	16420	~~352.21~~	228.94
16	3.0	81	92	140	16	5	16430	~~352.21~~	228.94
16	4.0	81	92	140	16	5	16440	~~352.21~~	228.94
18	0.2	91	102	150	18	5	18402	~~402.80~~	261.82
18	1.0	91	102	150	18	5	18410	~~402.80~~	261.82
18	1.5	91	102	150	18	5	18415	~~402.80~~	261.82
18	1.6	91	102	150	18	5	18416	~~402.80~~	261.82
18	2.0	91	102	150	18	5	18420	~~402.80~~	261.82
18	3.0	91	102	150	18	5	18430	~~402.80~~	261.82
18	4.0	91	102	150	18	5	18440	~~402.80~~	261.82
20	0.2	102	113	163	20	5	20402	~~486.38~~	316.15
20	1.0	102	113	163	20	5	20410	~~486.38~~	316.15
20	1.5	102	113	163	20	5	20415	~~486.38~~	316.15
20	1.6	102	113	163	20	5	20416	~~486.38~~	316.15
20	2.0	102	113	163	20	5	20420	~~486.38~~	316.15
20	3.0	102	113	163	20	5	20430	~~486.38~~	316.15
20	4.0	102	113	163	20	5	20440	~~486.38~~	316.15

	53 593 ...
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CircularLine – End milling cutter with corner radius

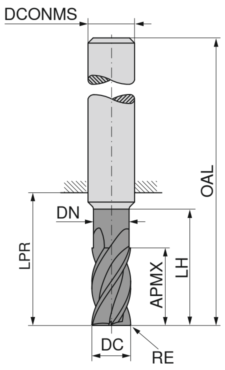
- ▲ Chip breaker 0.9 x DC
- ▲ Cutting depth: 3 x DC

CCR UNI | λ_s = 30° 31° γ_s = 8° | ZEFP | HPC

WNT \ Performance

DPX72S

DRAGONSKIN



Factory standard

HB

DC e8 mm	RE ±0,05 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	53 642 ...	£	PG V1 £
6	0.2	19	5.8	25	27	63	6	6	06202	~~58.00~~	37.70
6	1.0	19	5.8	25	27	63	6	6	06210	~~59.23~~	38.50
6	1.5	19	5.8	25	27	63	6	6	06215	~~59.23~~	38.50
8	0.2	25	7.7	33	35	71	8	6	08202	~~75.26~~	48.92
8	1.0	25	7.7	33	35	71	8	6	08210	~~77.75~~	50.54
8	1.5	25	7.7	33	35	71	8	6	08215	~~77.75~~	50.54
8	2.0	25	7.7	33	35	71	8	6	08220	~~77.75~~	50.54
10	0.2	31	9.7	41	43	83	10	6	10202	~~106.11~~	68.97
10	1.0	31	9.7	41	43	83	10	6	10210	~~108.57~~	70.57
10	1.5	31	9.7	41	43	83	10	6	10215	~~108.57~~	70.57
10	1.6	31	9.7	41	43	83	10	6	10216	~~108.57~~	70.57
10	2.0	31	9.7	41	43	83	10	6	10220	~~108.57~~	70.57
12	0.2	37	11.6	47	49	94	12	6	12202	~~124.62~~	81.00
12	1.0	37	11.6	47	49	94	12	6	12210	~~128.32~~	83.41
12	1.5	37	11.6	47	49	94	12	6	12215	~~128.32~~	83.41
12	1.6	37	11.6	47	49	94	12	6	12216	~~128.32~~	83.41
12	2.0	37	11.6	47	49	94	12	6	12220	~~128.32~~	83.41
12	3.0	37	11.6	47	49	94	12	6	12230	~~128.32~~	83.41
16	0.2	49	15.5	61	63	111	16	6	16202	~~257.89~~	167.63
16	1.0	49	15.5	61	63	111	16	6	16210	~~260.35~~	169.23
16	1.5	49	15.5	61	63	111	16	6	16215	~~260.35~~	169.23
16	1.6	49	15.5	61	63	111	16	6	16216	~~260.35~~	169.23
16	2.0	49	15.5	61	63	111	16	6	16220	~~260.35~~	169.23
16	3.0	49	15.5	61	63	111	16	6	16230	~~260.35~~	169.23
16	4.0	49	15.5	61	63	111	16	6	16240	~~260.35~~	169.23
20	0.2	61	19.5	75	77	127	20	6	20202	~~361.54~~	235.00
20	1.0	61	19.5	75	77	127	20	6	20210	~~365.21~~	237.39
20	1.5	61	19.5	75	77	127	20	6	20215	~~365.21~~	237.39
20	1.6	61	19.5	75	77	127	20	6	20216	~~365.21~~	237.39
20	2.0	61	19.5	75	77	127	20	6	20220	~~365.21~~	237.39
20	3.0	61	19.5	75	77	127	20	6	20230	~~365.21~~	237.39
20	4.0	61	19.5	75	77	127	20	6	20240	~~365.21~~	237.39

	53 642 ...
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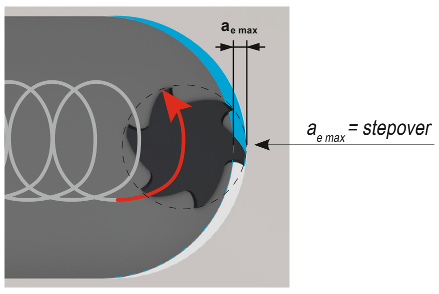
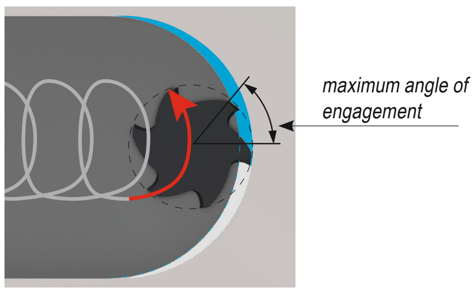
Trochoidal milling

When programming the various CAM systems different information is required.





Features & benefits of trochoidal milling

- ▲ reduced tool wear
- ▲ higher material removal rate than HPC machining possible
- ▲ spindle and machine-friendly
- ▲ suitable for low-power machines
- ▲ suitable for thin-walled components and unstable workpiece clamping

Calculation of the average chip thickness

$$h_m \approx f_z \sqrt{\frac{a_e}{DC}} \qquad f_z \approx h_m \sqrt{\frac{DC}{a_e}}$$

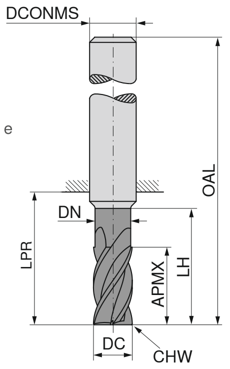
$a_{e\,max}$ = maximum lateral infeed (depending on the material to be machined)
f_z = maximum feed per tooth
h_m = average chip thickness
DC = tool diameter

CircularLine – End milling cutter

- ▲ Chip breaker 0.9 x DC
- ▲ 53 585 ... Cutting depth: 2 x DC
- ▲ 53 587 ... Cutting depth: 3 x DC

CCR UNI | λs = 30° 31° γs = 8° | ZEFP | HPC

WNT \ Performance



DPX72S
DRAGONSKIN

DPX72S
DRAGONSKIN

Factory standard | Factory standard

HB

DC e8	OAL	APMX	DN	LH	LPR	DCONMS h6	CHW	ZEFP	53 585 ... PG V1			53 587 ... PG V1		
mm	mm	mm	mm	mm	mm	mm	mm			£	£		£	£
6	57	13	5.8	19	21	6	0.2	6	060	~~59.17~~	38.46			
6	63	19	5.8	25	27	6	0.2	6				060	~~58.00~~	37.70
8	63	21	7.7	25	27	8	0.2	6	080	~~77.16~~	50.15			
8	71	25	7.7	33	35	8	0.2	6				080	~~75.26~~	48.92
10	72	22	9.7	30	32	10	0.2	6	100	~~99.14~~	64.44			
10	83	31	9.7	41	43	10	0.2	6				100	~~106.11~~	68.97
12	83	26	11.6	36	38	12	0.2	6	120	~~127.49~~	82.87			
12	94	37	11.6	47	49	12	0.2	6				120	~~124.62~~	81.00
16	92	36	15.5	42	44	16	0.2	6	160	~~254.31~~	165.30			
16	111	49	15.5	61	63	16	0.2	6				160	~~257.89~~	167.63
20	104	41	19.5	52	54	20	0.2	6	200	~~365.63~~	237.66			
20	127	61	19.5	75	77	20	0.2	6				200	~~361.54~~	235.00

	53 585 ...	53 587 ...
P	●	●
M	○	○
K	●	●
N		
S	○	○
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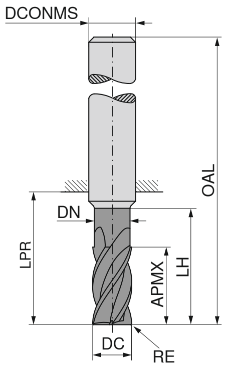
CircularLine – End milling cutter with corner radius

- ▲ Chip breaker 0.9 x DC
- ▲ Cutting depth: 2 x DC

CCR UNI | λs = 30° 31° γs = 8° | ZEFP | HPC

WNT \ Performance



DPX72S
DRAGONSKIN

Factory standard

HB

DC e8	OAL	RE ±0,05	APMX	DN	LH	LPR	DCONMS h6	ZEFP	53 586 ... PG V1		
mm	mm	mm	mm	mm	mm	mm	mm			£	£
6	57	1.0	13	5.8	19	21	6	6	06010	~~59.49~~	38.67
6	57	0.2	13	5.8	19	21	6	6	06002	~~59.17~~	38.46
6	57	1.5	13	5.8	19	21	6	6	06015	~~59.49~~	38.67
8	63	1.5	21	7.7	25	27	8	6	08015	~~79.00~~	51.35
8	63	0.2	21	7.7	25	27	8	6	08002	~~77.16~~	50.15
8	63	1.0	21	7.7	25	27	8	6	08010	~~79.00~~	51.35
8	63	2.0	21	7.7	25	27	8	6	08020	~~79.00~~	51.35
10	72	1.5	22	9.7	30	32	10	6	10015	~~101.86~~	66.21
10	72	0.2	22	9.7	30	32	10	6	10002	~~99.14~~	64.44
10	72	1.0	22	9.7	30	32	10	6	10010	~~101.86~~	66.21
10	72	1.6	22	9.7	30	32	10	6	10016	~~101.86~~	66.21
10	72	2.0	22	9.7	30	32	10	6	10020	~~101.86~~	66.21
12	83	1.5	26	11.6	36	38	12	6	12015	~~128.08~~	83.25
12	83	0.2	26	11.6	36	38	12	6	12002	~~127.49~~	82.87
12	83	1.0	26	11.6	36	38	12	6	12010	~~128.08~~	83.25
12	83	1.6	26	11.6	36	38	12	6	12016	~~128.08~~	83.25
12	83	2.0	26	11.6	36	38	12	6	12020	~~128.08~~	83.25
12	83	3.0	26	11.6	36	38	12	6	12030	~~128.08~~	83.25
16	92	4.0	36	15.5	42	44	16	6	16040	~~265.01~~	172.26
16	92	0.2	36	15.5	42	44	16	6	16002	~~254.31~~	165.30
16	92	1.0	36	15.5	42	44	16	6	16010	~~274.20~~	178.23
16	92	1.5	36	15.5	42	44	16	6	16015	~~265.01~~	172.26
16	92	1.6	36	15.5	42	44	16	6	16016	~~265.01~~	172.26
16	92	2.0	36	15.5	42	44	16	6	16020	~~265.01~~	172.26
16	92	3.0	36	15.5	42	44	16	6	16030	~~265.01~~	172.26
20	104	1.6	41	19.5	52	54	20	6	20016	~~369.33~~	240.06
20	104	0.2	41	19.5	52	54	20	6	20002	~~365.63~~	237.66
20	104	1.0	41	19.5	52	54	20	6	20010	~~369.33~~	240.06
20	104	1.5	41	19.5	52	54	20	6	20015	~~369.33~~	240.06
20	104	2.0	41	19.5	52	54	20	6	20020	~~369.33~~	240.06
20	104	3.0	41	19.5	52	54	20	6	20030	~~369.33~~	240.06
20	104	4.0	41	19.5	52	54	20	6	20040	~~369.33~~	240.06

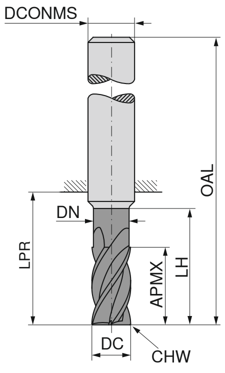
	53 586 ...
P	●
M	○
K	●
N	
S	○
H	
O	

CircularLine – End milling cutter

- ▲ Chip breaker 0,9 x DC
- ▲ Cutting depth: 4 x DC

CCR UNI | λs = 35° 36° γs = 8° | ZEFP | HPC

WNT \ Performance



DPX72S
DRAGONSKIN

Factory standard

HB

DC e8	OAL	APMX	DN	LH	LPR	DCONMS h6	CHW	ZEFP	53 589 ... PG V1		
mm	mm	mm	mm	mm	mm	mm	mm			£	£
6	67	25	5.8	29	31	6	0.2	5	060	~~60.46~~	39.30
8	76	33	7.7	38	40	8	0.2	5	080	~~77.75~~	50.54
10	89	41	9.7	47	49	10	0.2	5	100	~~107.35~~	69.78
12	102	49	11.6	55	57	12	0.2	5	120	~~130.79~~	85.01
16	123	65	15.5	73	75	16	0.2	5	160	~~262.82~~	170.83
20	143	82	19.5	91	93	20	0.2	5	200	~~370.17~~	240.61

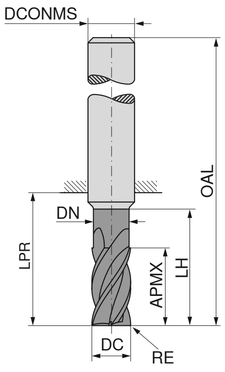
	53 589 ...
P	●
M	○
K	●
N	
S	○
H	
O	

CircularLine – End milling cutter with corner radius

- ▲ Chip breaker 0.9 x DC
- ▲ Cutting depth: 4 x DC

CCR UNI | λs = 35° 36° γs = 9° | ZEFP | HPC

WNT \ Performance



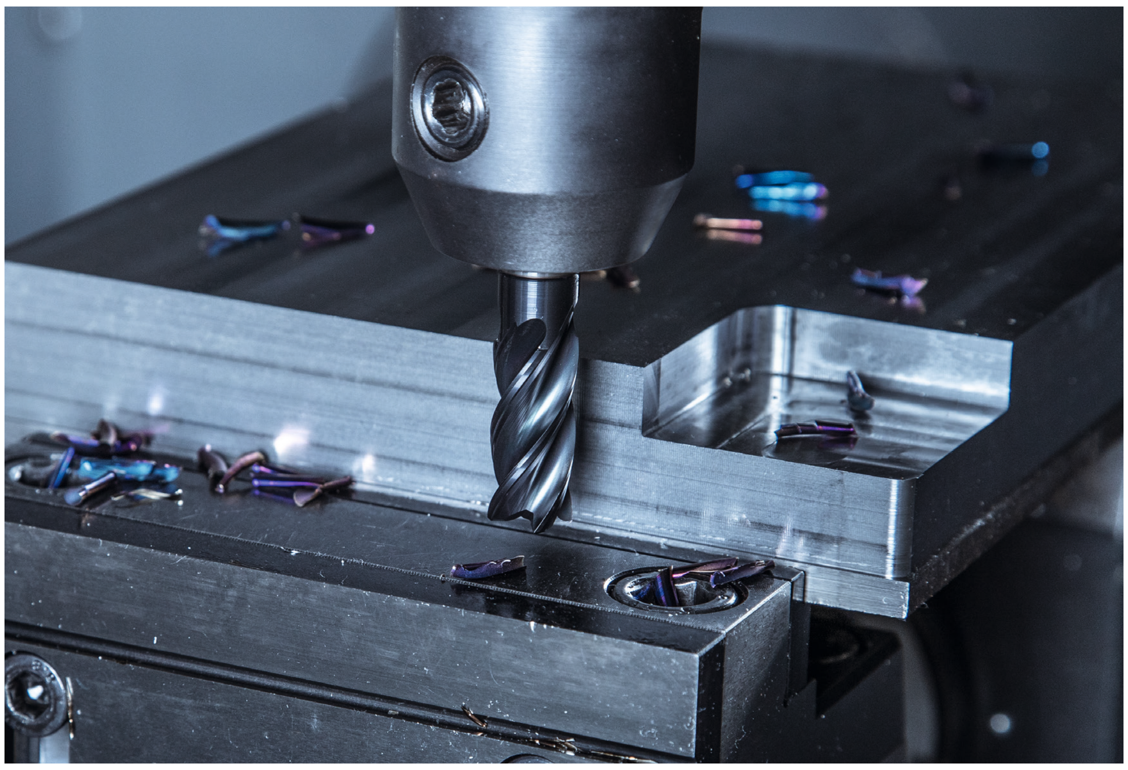
DPX72S
DRAGONSKIN

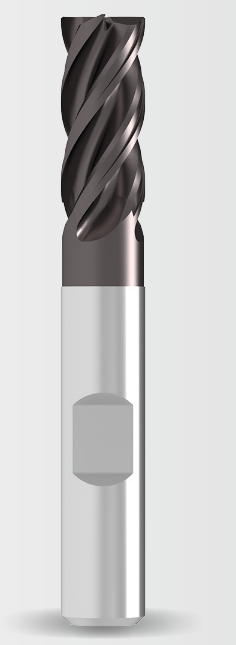
Factory standard

HB

DC e8	OAL	RE ±0,05	APMX	DN	LH	LPR	DCONMS h6	ZEFP	53 593 ... PG V1		
mm	mm	mm	mm	mm	mm	mm	mm			£	£
6	67	1.5	25	5.8	29	31	6	5	06015	~~61.69~~	40.10
6	67	1.0	25	5.8	29	31	6	5	06010	~~61.69~~	40.10
6	67	0.2	25	5.8	29	31	6	5	06002	~~60.46~~	39.30
8	76	1.5	33	7.7	38	40	8	5	08015	~~78.97~~	51.33
8	76	1.0	33	7.7	38	40	8	5	08010	~~78.97~~	51.33
8	76	2.0	33	7.7	38	40	8	5	08020	~~78.97~~	51.33
8	76	0.2	33	7.7	38	40	8	5	08002	~~77.75~~	50.54
10	89	1.5	41	9.7	47	49	10	5	10015	~~109.82~~	71.38
10	89	1.0	41	9.7	47	49	10	5	10010	~~109.82~~	71.38
10	89	1.6	41	9.7	47	49	10	5	10016	~~109.82~~	71.38
10	89	2.0	41	9.7	47	49	10	5	10020	~~109.82~~	71.38
10	89	0.2	41	9.7	47	49	10	5	10002	~~107.35~~	69.78
12	102	1.0	49	11.6	55	57	12	5	12010	~~134.49~~	87.42
12	102	1.5	49	11.6	55	57	12	5	12015	~~134.49~~	87.42
12	102	1.6	49	11.6	55	57	12	5	12016	~~134.49~~	87.42
12	102	2.0	49	11.6	55	57	12	5	12020	~~134.49~~	87.42
12	102	3.0	49	11.6	55	57	12	5	12030	~~134.49~~	87.42
12	102	0.2	49	11.6	55	57	12	5	12002	~~130.79~~	85.01
16	123	1.6	65	15.5	73	75	16	5	16016	~~267.75~~	174.04
16	123	1.0	65	15.5	73	75	16	5	16010	~~267.75~~	174.04
16	123	1.5	65	15.5	73	75	16	5	16015	~~267.75~~	174.04
16	123	2.0	65	15.5	73	75	16	5	16020	~~267.75~~	174.04
16	123	3.0	65	15.5	73	75	16	5	16030	~~267.75~~	174.04
16	123	4.0	65	15.5	73	75	16	5	16040	~~267.75~~	174.04
16	123	0.2	65	15.5	73	75	16	5	16002	~~262.82~~	170.83
20	143	2.0	82	19.5	91	93	20	5	20020	~~376.33~~	244.61
20	143	1.0	82	19.5	91	93	20	5	20010	~~376.33~~	244.61
20	143	1.5	82	19.5	91	93	20	5	20015	~~376.33~~	244.61
20	143	1.6	82	19.5	91	93	20	5	20016	~~376.33~~	244.61
20	143	3.0	82	19.5	91	93	20	5	20030	~~376.33~~	244.61
20	143	4.0	82	19.5	91	93	20	5	20040	~~376.33~~	244.61
20	143	0.2	82	19.5	91	93	20	5	20002	~~370.17~~	240.61

	53 593 ...
P	●
M	○
K	●
N	
S	○
H	
O	





Ti 1000 STANDARD LINE

End milling cutter

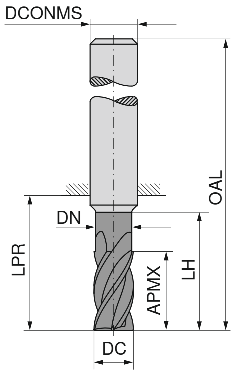
N

λ_s = 35° 38°
γ_s = 9°

ZEFP

HPC

WNT \ Standard



TCS

Ti1000 | Ti1000 | Ti1000

≈DIN 6527 | ≈DIN 6527 | ≈DIN 6527

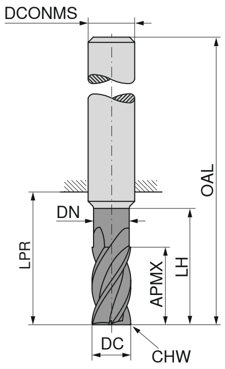
HB | HB | HB

DC h10 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	54 070 ... PG V3	£	£	54 070 ... PG V3	£	£	54 070 ... PG V3	£	£
3	5			14	50	6	4	**03100**	~~13.65~~	13.20						
3	8	2.8	13	21	57	6	4				**03200**	~~13.65~~	13.20			
3	8	2.8	15	22	69	6	4							**03400**	~~19.95~~	19.40
4	8			18	54	6	4	**04100**	~~13.65~~	13.20						
4	11	3.8	17	21	57	6	4				**04200**	~~13.65~~	13.20			
4	11	3.8	20	26	69	6	4							**04400**	~~19.95~~	19.40
5	9			18	54	6	4	**05100**	~~13.65~~	13.20						
5	13	4.8	19	21	57	6	4				**05200**	~~13.65~~	13.20			
5	13	4.8	25	34	69	6	4							**05400**	~~22.05~~	21.40
6	10			18	54	6	4	**06100**	~~13.65~~	13.20						
6	13	5.8	19	21	57	6	4				**06200**	~~16.80~~	16.30			
6	13	5.8	30	34	69	6	4							**06400**	~~25.20~~	24.40
8	12			22	58	8	4	**08100**	~~19.95~~	19.40						
8	21	7.7	25	27	63	8	4				**08200**	~~21.00~~	20.40			
8	17	7.7	40	44	79	8	4							**08400**	~~31.50~~	30.60
10	14			26	66	10	4	**10100**	~~25.20~~	24.40						
10	22	9.7	30	32	72	10	4				**10200**	~~28.35~~	27.50			
10	21	9.7	50	54	93	10	4							**10400**	~~44.10~~	42.80
12	16			28	73	12	4	**12100**	~~36.75~~	35.60						
12	26	11.6	36	38	83	12	4				**12200**	~~44.10~~	42.80			
12	25	11.6	60	64	108	12	4							**12400**	~~54.60~~	53.00
16	22			34	82	16	4	**16100**	~~64.05~~	62.10						
16	32	15.5	42	44	92	16	4				**16200**	~~68.25~~	66.20			
16	33	15.5	80	84	132	16	4							**16400**	~~101.85~~	98.80
20	26			42	92	20	4	**20100**	~~95.55~~	92.70						
20	41	19.5	52	54	104	20	4				**20200**	~~102.90~~	99.80			
20	42	19.5	100	104	154	20	4							**20400**	~~139.65~~	135.50
P								●			●			●		
M								●			●			○		
K								●			●			●		
N								○			○					
S								○			○					
H																
O																

End milling cutter

N λ_s = 35° 38° γ_s = 9° ZEFP HPC

WNT \ Standard



TCS

Ti1000	Ti1000	Ti1000
		
≈DIN 6527	≈DIN 6527	≈DIN 6527
HB	HB	HB

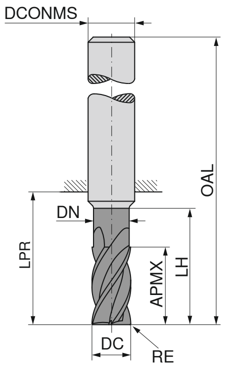
DC h10	APMX	DN	LH	LPR	OAL	DCONMS h6	CHW	ZEFP	54 071 ...	PG V3		54 071 ...	PG V3		54 071 ...	PG V3	
mm	mm	mm	mm	mm	mm	mm	mm			£	£		£	£		£	£
3	5			14	50	6	0.1	4	03100	~~13.65~~	13.20						
3	8	2.8	13	21	57	6	0.1	4				03200	~~13.65~~	13.20			
3	8	2.8	15	22	69	6	0.1	4							03400	~~19.95~~	19.40
4	8			18	54	6	0.1	4	04100	~~13.65~~	13.20						
4	11	3.8	17	21	57	6	0.1	4				04200	~~13.65~~	13.20			
4	11	3.8	20	26	69	6	0.1	4							04400	~~19.95~~	19.40
5	9			18	54	6	0.1	4	05100	~~13.65~~	13.20						
5	13	4.8	19	21	57	6	0.1	4				05200	~~13.65~~	13.20			
5	13	4.8	25	34	69	6	0.1	4							05400	~~22.05~~	21.40
6	10			18	54	6	0.1	4	06100	~~13.65~~	13.20						
6	13	5.8	19	21	57	6	0.1	4				06200	~~16.80~~	16.30			
6	13	5.8	30	34	69	6	0.1	4							06400	~~25.20~~	24.40
8	12			22	58	8	0.2	4	08100	~~19.95~~	19.40						
8	21	7.7	25	27	63	8	0.2	4				08200	~~21.00~~	20.40			
8	17	7.7	40	44	79	8	0.2	4							08400	~~31.50~~	30.60
10	14			26	66	10	0.2	4	10100	~~25.20~~	24.40						
10	22	9.7	30	32	72	10	0.2	4				10200	~~28.35~~	27.50			
10	21	9.7	50	54	93	10	0.2	4							10400	~~44.10~~	42.80
12	16			28	73	12	0.3	4	12100	~~36.75~~	35.60						
12	26	11.6	36	38	83	12	0.3	4				12200	~~44.10~~	42.80			
12	25	11.6	60	64	108	12	0.3	4							12400	~~54.60~~	53.00
16	22			34	82	16	0.3	4	16100	~~64.05~~	62.10						
16	36	15.5	42	44	92	16	0.3	4				16200	~~68.25~~	66.20			
16	33	15.5	80	84	132	16	0.3	4							16400	~~101.85~~	98.80
20	26			42	92	20	0.3	4	20100	~~95.55~~	92.70						
20	41	19.5	52	54	104	20	0.3	4				20200	~~102.90~~	99.80			
20	42	19.5	100	104	154	20	0.3	4							20400	~~139.65~~	135.50

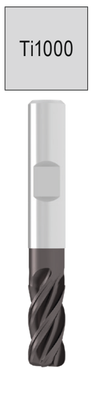
	54 071 ... 1	54 071 ... 2	54 071 ... 4
P	●	●	●
M	●	●	○
K	●	●	●
N	○	○	
S	○	○	
H			
O			

End milling cutter with corner radius

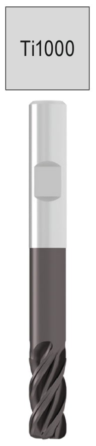
N | λs=35°/38° γs= 9° | ZEFP | HPC

WNT \ Standard





≈DIN 6527
HB



≈DIN 6527
HB

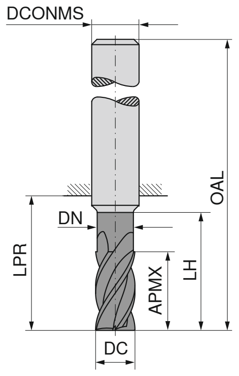
DC h10 mm	RE mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	54 072 ... PG V3	£	£	54 072 ... PG V3	£	£
3	0.1	8	2.8	13	21	57	6	4	**03201**	~~17.85~~	17.30			
3	0.3	8	2.8	13	21	57	6	4	**03203**	~~17.85~~	17.30			
3	0.5	8	2.8	13	21	57	6	4	**03205**	~~17.85~~	17.30			
3	1.0	8	2.8	13	21	57	6	4	**03210**	~~17.85~~	17.30			
3	0.5	8	2.8	15	22	69	6	4				**03405**	~~24.15~~	23.40
3	0.3	8	2.8	15	22	69	6	4				**03403**	~~24.15~~	23.40
3	1.0	8	2.8	15	22	69	6	4				**03410**	~~24.15~~	23.40
4	0.1	11	3.8	17	21	57	6	4	**04201**	~~17.85~~	17.30			
4	0.3	11	3.8	17	21	57	6	4	**04203**	~~17.85~~	17.30			
4	0.5	11	3.8	17	21	57	6	4	**04205**	~~17.85~~	17.30			
4	1.0	11	3.8	17	21	57	6	4	**04210**	~~17.85~~	17.30			
4	0.5	11	3.8	20	26	69	6	4				**04405**	~~24.15~~	23.40
4	0.3	11	3.8	20	26	69	6	4				**04403**	~~24.15~~	23.40
4	1.0	11	3.8	20	26	69	6	4				**04410**	~~24.15~~	23.40
5	0.5	13	4.8	19	21	57	6	4	**05205**	~~17.85~~	17.30			
5	0.1	13	4.8	19	21	57	6	4	**05201**	~~17.85~~	17.30			
5	0.3	13	4.8	19	21	57	6	4	**05203**	~~17.85~~	17.30			
5	1.0	13	4.8	19	21	57	6	4	**05210**	~~17.85~~	17.30			
5	0.5	13	4.8	25	34	69	6	4				**05405**	~~26.25~~	25.50
5	0.3	13	4.8	25	34	69	6	4				**05403**	~~26.25~~	25.50
5	1.0	13	4.8	25	34	69	6	4				**05410**	~~26.25~~	25.50
6	0.3	13	5.8	19	21	57	6	4	**06203**	~~19.95~~	19.40			
6	0.1	13	5.8	19	21	57	6	4	**06201**	~~19.95~~	19.40			
6	0.5	13	5.8	19	21	57	6	4	**06205**	~~19.95~~	19.40			
6	1.0	13	5.8	19	21	57	6	4	**06210**	~~19.95~~	19.40			
6	1.5	13	5.8	19	21	57	6	4	**06215**	~~19.95~~	19.40			
6	2.0	13	5.8	19	21	57	6	4	**06220**	~~19.95~~	19.40			
6	1.0	13	5.8	30	34	69	6	4				**06410**	~~29.40~~	28.50
6	0.3	13	5.8	30	34	69	6	4				**06403**	~~29.40~~	28.50
6	0.5	13	5.8	30	34	69	6	4				**06405**	~~29.40~~	28.50
6	1.5	13	5.8	30	34	69	6	4				**06415**	~~29.40~~	28.50
6	2.0	13	5.8	30	34	69	6	4				**06420**	~~29.40~~	28.50
8	0.1	21	7.7	25	27	63	8	4	**08201**	~~26.25~~	25.50			
8	0.3	21	7.7	25	27	63	8	4	**08203**	~~26.25~~	25.50			
8	0.5	21	7.7	25	27	63	8	4	**08205**	~~26.25~~	25.50			
8	1.0	21	7.7	25	27	63	8	4	**08210**	~~26.25~~	25.50			
8	1.5	21	7.7	25	27	63	8	4	**08215**	~~26.25~~	25.50			
8	2.0	21	7.7	25	27	63	8	4	**08220**	~~26.25~~	25.50			
8	1.0	17	7.7	40	44	79	8	4				**08410**	~~39.90~~	38.70
8	0.3	17	7.7	40	44	79	8	4				**08403**	~~39.90~~	38.70
8	0.5	17	7.7	40	44	79	8	4				**08405**	~~39.90~~	38.70
8	1.5	17	7.7	40	44	79	8	4				**08415**	~~39.90~~	38.70
8	2.0	17	7.7	40	44	79	8	4				**08420**	~~39.90~~	38.70
10	1.0	22	9.7	30	32	72	10	4	**10210**	~~33.60~~	32.60			
10	0.1	22	9.7	30	32	72	10	4	**10201**	~~33.60~~	32.60			
10	0.3	22	9.7	30	32	72	10	4	**10203**	~~33.60~~	32.60			
10	0.5	22	9.7	30	32	72	10	4	**10205**	~~33.60~~	32.60			
10	1.5	22	9.7	30	32	72	10	4	**10215**	~~33.60~~	32.60			
10	2.0	22	9.7	30	32	72	10	4	**10220**	~~33.60~~	32.60			
10	1.0	21	9.7	50	54	93	10	4				**10410**	~~53.55~~	51.90
10	0.3	21	9.7	50	54	93	10	4				**10403**	~~53.55~~	51.90
10	0.5	21	9.7	50	54	93	10	4				**10405**	~~53.55~~	51.90
10	1.5	21	9.7	50	54	93	10	4				**10415**	~~53.55~~	51.90
10	2.0	21	9.7	50	54	93	10	4				**10420**	~~53.55~~	51.90
12	0.5	26	11.6	36	38	83	12	4	**12205**	~~51.45~~	49.90			
12	0.1	26	11.6	36	38	83	12	4	**12201**	~~51.45~~	49.90			
12	0.3	26	11.6	36	38	83	12	4	**12203**	~~51.45~~	49.90			
12	1.0	26	11.6	36	38	83	12	4	**12210**	~~51.45~~	49.90			
12	1.5	26	11.6	36	38	83	12	4	**12215**	~~51.45~~	49.90			
12	2.0	26	11.6	36	38	83	12	4	**12220**	~~51.45~~	49.90			
12	3.0	26	11.6	36	38	83	12	4	**12230**	~~51.45~~	49.90			
12	1.5	25	11.6	60	64	108	12	4				**12415**	~~77.70~~	75.40
12	0.3	25	11.6	60	64	108	12	4				**12403**	~~77.70~~	75.40
12	0.5	25	11.6	60	64	108	12	4				**12405**	~~77.70~~	75.40
12	1.0	25	11.6	60	64	108	12	4				**12410**	~~77.70~~	75.40
12	2.0	25	11.6	60	64	108	12	4				**12420**	~~77.70~~	75.40
12	3.0	25	11.6	60	64	108	12	4				**12430**	~~77.70~~	75.40
16	0.3	36	15.5	42	44	92	16	4	**16203**	~~78.75~~	76.40			
16	0.1	36	15.5	42	44	92	16	4	**16201**	~~78.75~~	76.40			
16	0.5	36	15.5	42	44	92	16	4	**16205**	~~78.75~~	76.40			
16	1.0	36	15.5	42	44	92	16	4	**16210**	~~78.75~~	76.40			
16	1.5	36	15.5	42	44	92	16	4	**16215**	~~78.75~~	76.40			
16	2.0	36	15.5	42	44	92	16	4	**16220**	~~78.75~~	76.40			
16	3.0	36	15.5	42	44	92	16	4	**16230**	~~78.75~~	76.40			
16	4.0	36	15.5	42	44	92	16	4	**16240**	~~78.75~~	76.40			
16	1.5	33	15.5	80	84	132	16	4				**16415**	~~120.75~~	117.10
16	0.3	33	15.5	80	84	132	16	4				**16403**	~~120.75~~	117.10
16	0.5	33	15.5	80	84	132	16	4				**16405**	~~120.75~~	117.10
16	1.0	33	15.5	80	84	132	16	4				**16410**	~~120.75~~	117.10
16	2.0	33	15.5	80	84	132	16	4				**16420**	~~120.75~~	117.10
16	3.0	33	15.5	80	84	132	16	4				**16430**	~~120.75~~	117.10
16	4.0	33	15.5	80	84	132	16	4				**16440**	~~120.75~~	117.10
20	0.1	41	19.5	52	54	104	20	4	**20201**	~~113.40~~	110.00			
20	0.3	41	19.5	52	54	104	20	4	**20203**	~~113.40~~	110.00			
20	0.5	41	19.5	52	54	104	20	4	**20205**	~~113.40~~	110.00			
20	1.0	41	19.5	52	54	104	20	4	**20210**	~~113.40~~	110.00			
20	1.5	41	19.5	52	54	104	20	4	**20215**	~~113.40~~	110.00			
20	2.0	41	19.5	52	54	104	20	4	**20220**	~~113.40~~	110.00			
20	3.0	41	19.5	52	54	104	20	4	**20230**	~~113.40~~	110.00			
20	4.0	41	19.5	52	54	104	20	4	**20240**	~~113.40~~	110.00			
20	4.0	42	19.5	100	104	154	20	4				**20440**	~~178.50~~	173.10
20	0.3	42	19.5	100	104	154	20	4				**20403**	~~178.50~~	173.10
20	0.5	42	19.5	100	104	154	20	4				**20405**	~~178.50~~	173.10
20	1.0	42	19.5	100	104	154	20	4				**20410**	~~178.50~~	173.10
20	1.5	42	19.5	100	104	154	20	4				**20415**	~~178.50~~	173.10
20	2.0	42	19.5	100	104	154	20	4				**20420**	~~178.50~~	173.10
20	3.0	42	19.5	100	104	154	20	4				**20430**	~~178.50~~	173.10

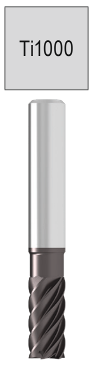
	54 072 ...	54 072 ...
P	●	●
M	●	○
K	●	●
N	○	
S	○	
H		
O		

Finish milling cutter

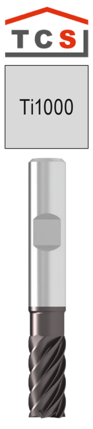
N | λs=48°/50° γs=13° | ZEFP | HPC

WNT \ Standard





≈DIN 6527
HA



≈DIN 6527
HB

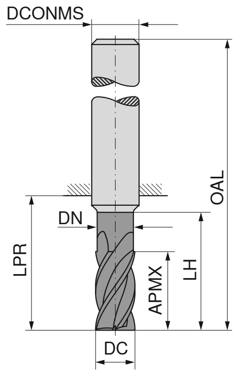
DC h10 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	54 076 ... PG V3	£	£	54 075 ... PG V3	£	£
6	13	5.6	19	21	57	6	6	**06200**	~~19.95~~	19.40	**06200**	~~19.95~~	19.40
8	19	7.6	25	27	63	8	6	**08200**	~~26.25~~	25.50	**08200**	~~26.25~~	25.50
10	22	9.6	30	32	72	10	6	**10200**	~~34.65~~	33.60	**10200**	~~34.65~~	33.60
12	26	11.5	36	38	83	12	6	**12200**	~~55.65~~	54.00	**12200**	~~55.65~~	54.00
16	32	15.0	42	44	92	16	6	**16200**	~~85.05~~	82.50	**16200**	~~85.05~~	82.50
20	38	19.0	52	54	104	20	6	**20200**	~~129.15~~	125.30	**20200**	~~129.15~~	125.30

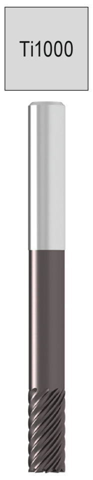
	54 076 ...	54 075 ...
P	●	●
M	●	●
K	○	○
N	○	○
S	○	○
H		
O		

Finish milling cutter

N | λs=48°/50° γs=13° | ZEFP | HPC

WNT \ Standard





≈DIN 6527
HA

≈DIN 6527
HB

DC h10 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	ZEFP	54 076 ... PG V3	£	£	54 075 ... PG V3	£	£
6	15	5.6	42	44	80	6	6	**06400**	~~31.50~~	30.60	**06400**	~~31.50~~	30.60
8	20	7.6	62	64	100	8	6	**08400**	~~39.90~~	38.70	**08400**	~~39.90~~	38.70
10	25	9.6	58	60	100	10	6	**10400**	~~54.60~~	53.00	**10400**	~~54.60~~	53.00
12	30	11.5	73	75	120	12	6	**12400**	~~67.20~~	65.20	**12400**	~~67.20~~	65.20
16	40	15.0	100	102	150	16	6	**16400**	~~128.10~~	124.30	**16400**	~~128.10~~	124.30
20	50	19.0	98	100	150	20	6	**20400**	~~175.35~~	170.10	**20400**	~~175.35~~	170.10

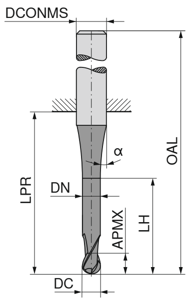
	54 076 ...	54 075 ...
P	●	●
M	●	●
K	○	○
N	○	○
S	○	○
H		
O		

Ball Nosed Cutter

▲ Radius accuracy: ± 0,01 mm

N | λ_s=30° γ_s=13° | ZEFP | **HPC** | Ti1000

WNT \ Standard



≈DIN 6527

HB

DC h10 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	α°	ZEFP	54 073 ...	PG V3 £	£
3	5	2.9	9	14	50	6	15	2	**03115**	~~16.80~~	16.30
4	8	3.9	12	18	54	6	45	2	**04120**	~~16.80~~	16.30
5	9	4.9	15	18	54	6	45	2	**05125**	~~16.80~~	16.30
6	10	5.9	17	18	54	6	45	2	**06130**	~~17.85~~	17.30
8	12	7.8	20	22	58	8	45	2	**08140**	~~23.10~~	22.40
10	14	9.8	26	26	66	10	45	2	**10150**	~~29.40~~	28.50
12	16	11.8	28	28	73	12	45	2	**12160**	~~42.00~~	40.70
16	22	15.7	32	34	82	16	45	2	**16180**	~~69.30~~	67.20
20	26	19.7	40	42	92	20	45	2	**20110**	~~98.70~~	95.70

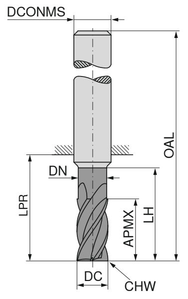
	54 073 ...
P	●
M	○
K	●
N	●
S	○
H	
O	

Rough milling cutter

▲ With roughing profile

NR | λ_s=35° 38° γ_s=10° | ZEFP | **HPC** | Ti1000

WNT \ Standard



≈DIN 6527

HB

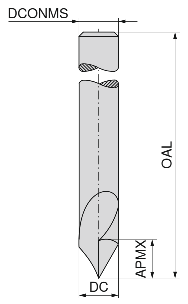
DC f8 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	CHW mm	ZEFP	54 077 ...	PG V3 £	£
4	11	3.8	17	21	57	6	0.1	4	**00400**	~~19.95~~	19.40
5	13	4.8	19	21	57	6	0.1	4	**00500**	~~19.95~~	19.40
6	13	5.8	19	21	57	6	0.1	4	**00600**	~~24.15~~	23.40
8	21	7.7	25	27	63	8	0.2	4	**00800**	~~30.45~~	29.50
10	22	9.7	30	32	72	10	0.2	4	**01000**	~~37.80~~	36.70
12	26	11.6	36	38	83	12	0.3	4	**01200**	~~61.95~~	60.10
16	36	15.5	42	44	92	16	0.3	4	**01600**	~~93.45~~	90.60
20	41	19.5	52	54	104	20	0.3	4	**02000**	~~138.60~~	134.40

	54 077 ...
P	●
M	●
K	●
N	○
S	○
H	
O	

Engraving cutter 60°

W | λ_s=15° γ_s=20° | ZEFP

WNT \ Standard



Factory standard

HA

DC h6 mm	APMX mm	OAL mm	DCONMS h6 mm	ZEFP	52 195 ...	PG V1 £	£
3	15	50	3	1	**030**	~~56.07~~	36.45
4	18	50	4	1	**040**	~~58.87~~	38.27
6	20	54	6	1	**060**	~~64.10~~	41.67

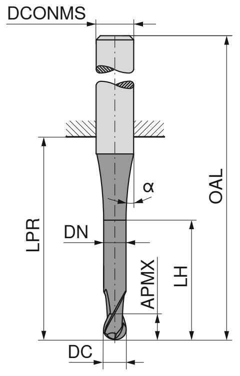
	52 195 ...
P	○
M	○
K	○
N	●
S	○
H	
O	●

Ball Nosed Cutter

▲ Radius accuracy: ± 0,01 mm

N | λ_s=35° 38° γ_s= 7° | ZEFP | **HPC** | Ti1000 | TCS Ti1000

WNT \ Standard



≈DIN 6527 | ≈DIN 6527

HB | HB

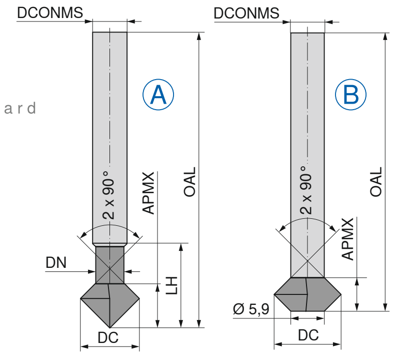
DC h10 mm	APMX mm	DN mm	LH mm	LPR mm	OAL mm	DCONMS h6 mm	α°	ZEFP	54 074 ...	PG V3 £	£	54 074 ...	PG V3 £	£
3	8			21	57	6	30	4	**03115**	~~16.80~~	16.30			
3	8	2.9	15	21	57	6	45	4				**03215**	~~16.80~~	16.30
4	11			21	57	6	30	4	**04120**	~~16.80~~	16.30			
4	11	3.9	16	21	57	6	45	4				**04220**	~~16.80~~	16.30
5	13			21	57	6	30	4	**05125**	~~16.80~~	16.30			
5	13	4.9	19	21	57	6	45	4				**05225**	~~16.80~~	16.30
6	13			21	57	6	30	4	**06130**	~~17.85~~	17.30			
6	13	5.9	19	21	57	6	45	4				**06430**	~~19.95~~	19.40
8	19			36	72	8	30	4	**08140**	~~23.10~~	22.40			
8	19	7.8	25	27	72	8	45	4				**08440**	~~24.15~~	23.40
10	22			32	72	10	30	4	**10150**	~~29.40~~	28.50			
10	22	9.7	30	32	72	10	45	4				**10450**	~~31.50~~	30.60
12	26			38	83	12	30	4	**12160**	~~42.00~~	40.70			
12	26	11.7	36	38	83	12	45	4				**12460**	~~49.35~~	47.90
16	32			44	92	16	30	4	**16180**	~~69.30~~	67.20			
16	32	15.5	42	44	92	16	45	4				**16480**	~~72.45~~	70.30
20	38			54	104	20	30	4	**20110**	~~98.70~~	95.70			
20	38	19.5	52	54	104	20	45	4				**20410**	~~105.00~~	101.90

	54 074 ...	54 074 ...
P	●	●
M	●	●
K	●	●
N	○	○
S		
H		
O		

NC front and rear chamfer milling cutter

N | λ_s=0° γ_s=0° | ZEFP | Ti1000

WNT \ Standard



Factory standard

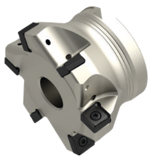
HA

DC mm	APMX mm	DN mm	LH mm	OAL mm	DCONMS h5 mm	ZEFP	Fig.	52 159 ...	PG V1 £	£
3	2.0	2.2	12.0	75	4	4	A	**030**	~~104.64~~	68.02
4	2.7	2.9	17.7	75	4	4	A	**040**	~~104.06~~	67.64
5	3.0	3.9	18.0	75	5	4	A	**050**	~~108.10~~	70.27
6	4.0	3.9	19.0	100	6	4	A	**060**	~~108.20~~	70.33
8	2.0			100	6	4	B	**080**	~~143.29~~	93.14
10	4.0			100	6	4	B	**100**	~~176.90~~	114.99
12	6.0			100	6	4	B	**120**	~~210.85~~	137.05

	52 159 ...
P	●
M	○
K	●
N	○
S	○
H	○
O	●

MILLING TOOLS WITH INDEXABLE INSERTS

SYSTEMS

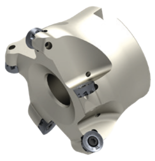


MaxiMill 491 – first choice indexable shoulder milling system with 8 edges.

MaxiMill C 211-11 – first choice indexable end milling system.

MaxiMill A 271-12 – first choice indexable face milling system also with high feed geometry option.

MaxiMill A HFC – first choice indexable high feed milling system.

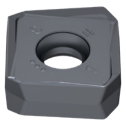


MaxiMill 251 – first choice indexable button milling system.

WPS – first choice indexable chamfer milling cutter.

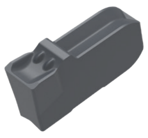
MaxiMill Slot-SX – New side and face milling cutters deliver maximum process security and optimum performance thanks to thro' coolant.

GRADES

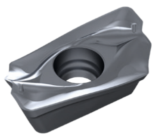


CTPM240 – first choice for stainless steel and other corrosion resistant materials.

CTWN215 – first choice for aluminium and other non ferrous materials.



M1 – first choice chipbreaker for parting off.



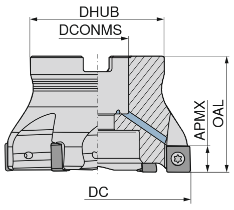
CTPP235 – first choice for steels with or without coolant.

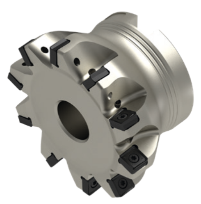
CTC5240 – first choice for titanium and heat resistant super alloys.

MaxiMill – 491-09 Shell mill

κ = 90°

CERATIZIT \ Performance



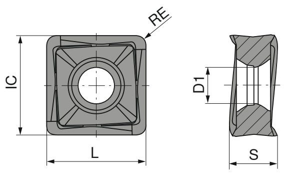


Designation	DC mm	OAL mm	DHUB mm	DCONMS H6 mm	APMX mm	Insert	ZNF
A491.40.R.03-09	40	40	38	16	6	SNHU 09T3	3
A491.40.R.05-09	40	40	38	16	6	SNHU 09T3	5
A491.50.R.04-09	50	40	43	22	6	SNHU 09T3	4
A491.50.R.06-09	50	40	43	22	6	SNHU 09T3	6
A491.63.R.05-09	63	40	48	22	6	SNHU 09T3	5
A491.63.R.08-09	63	40	48	22	6	SNHU 09T3	8
A491.80.R.06-09	80	50	58	27	6	SNHU 09T3	6
A491.80.R.10-09	80	50	58	27	6	SNHU 09T3	10

Designation	**50 775 ...** PG 2B/40	£	£	**50 776 ...** PG 2B/40	£	£
A491.40.R.03-09	**240**	~~388.78~~	56.00			
A491.40.R.05-09				**240**	~~451.93~~	65.00
A491.50.R.04-09	**250**	~~430.88~~	62.00			
A491.50.R.06-09				**250**	~~493.92~~	71.00
A491.63.R.05-09	**263**	~~514.96~~	74.00			
A491.63.R.08-09				**263**	~~609.48~~	87.00
A491.80.R.06-09	**280**	~~546.55~~	78.00			
A491.80.R.10-09				**280**	~~672.62~~	96.00

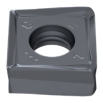
SNHU

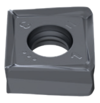
Designation	IC mm	L mm	S mm	D1 mm
SNHU 09T3..	9.15	9.15	3.70	3.85

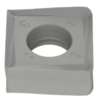


SNHU

CERATIZIT \ Performance







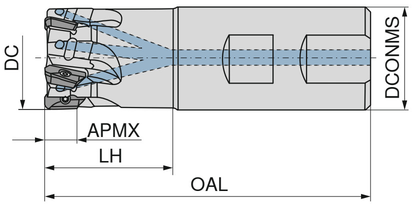
ISO	RE mm	**-M50** CTPM240 DRAGONSKIN SNHU **51 120 ...** PG 1B/61	£	£	**-M50** CTPP235 DRAGONSKIN SNHU **51 120 ...** PG 1B/61	£	£	**-F10** CTWN215 SNHU **51 118 ...** PG 1B/61	£	£	**-F40** CTC5240 DRAGONSKIN SNHU **51 126 ...** PG 1H/17	£	£
09T308ER	0.8										**15800**	~~27.52~~	20.64
09T308FR	0.8							**358**	~~22.00~~	16.50			
09T308SR	0.8	**408**	~~22.00~~	16.50	**108**	~~22.00~~	16.50						
09T312FR	1.2							**36200**	~~22.00~~	16.50			
09T312SR	1.2	**41200**	~~22.00~~	16.50	**11200**	~~22.00~~	16.50						
09T316FR	1.6							**36600**	~~22.00~~	16.50			
09T316SR	1.6	**41600**	~~22.00~~	16.50	**11600**	~~22.00~~	16.50						
P		○			●								
M		●			○								
K					○			○					
N								●					
S											●		
H													
O								○					

MaxiMill – 211-11 End milling cutter

▲ Insert radius >1,6 mm: Modify cutter body

κ = 90°

CERATIZIT \ Performance

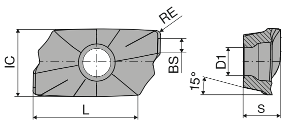


TCS

ISO designation	DC mm	OAL mm	LH mm	DCONMS h6 mm	APMX mm	RPMX 1/min.	Insert	ZNF	A 50 737 ... PG 2B/40	£	£	50 737 ... PG 2B/40	£	£
C211.16.R.02-11-A-25	16	75	25	16	10	42000	XD.T 11T3	2	116	~~231.03~~	33.00			
C211.16.R.02-11-B-25	16	75	25	16	10	42000	XD.T 11T3	2				016	~~231.03~~	33.00
C211.16.R.02-11-A15-32-165	16	165	32	15	10	14800	XD.T 11T3	2	316	~~231.03~~	33.00			
C211.16.R.02-11-A-32-165	16	165	32	16	10	14800	XD.T 11T3	2	216	~~231.03~~	33.00			
C211.20.R.03-11-A-25	20	77	25	20	10	36900	XD.T 11T3	3	120	~~262.30~~	37.00			
C211.20.R.03-11-B-25	20	77	25	20	10	36900	XD.T 11T3	3				020	~~262.30~~	37.00
C211.20.R.02-11-A-25	20	77	25	20	10	36900	XD.T 11T3	2	12002	~~243.56~~	37.00			
C211.20.R.03-11-A-32-165	20	165	32	20	10	15800	XD.T 11T3	3	320	~~262.30~~	37.00			
C211.20.R.02-11-A19-40-200	20	200	40	19	10	10500	XD.T 11T3	2	620	~~243.56~~	35.00			
C211.20.R.02-11-A-40-200	20	200	40	20	10	10500	XD.T 11T3	2	420	~~243.56~~	35.00			
C211.25.R.03-11-A-32	25	90	32	25	10	33200	XD.T 11T3	3	625	~~274.82~~	39.00			
C211.25.R.04-11-B-32	25	90	32	25	10	33200	XD.T 11T3	4				025	~~293.56~~	42.00
C211.25.R.04-11-A-32	25	90	32	25	10	33200	XD.T 11T3	4	125	~~293.56~~	42.00			
C211.25.R.04-11-A-40-165	25	165	40	25	10	19900	XD.T 11T3	4	325	~~293.56~~	42.00			
C211.25.R.03-11-A-50-225	25	225	50	25	10	9400	XD.T 11T3	3	425	~~274.82~~	39.00			
C211.25.R.03-11-A24-50-225	25	225	50	24	10	9400	XD.T 11T3	3	825	~~274.82~~	39.00			
C211.25.R.02-11-A-50-225	25	225	50	25	10	9400	XD.T 11T3	2	02502	~~256.18~~	38.00			
C211.32.R.04-11-A-40	32	102	40	32	10	30200	XD.T 11T3	4	13204	~~306.00~~	46.00			
C211.32.R.05-11-B-40	32	102	40	32	10	30200	XD.T 11T3	5				032	~~324.84~~	46.00
C211.32.R.05-11-A-40	32	102	40	32	10	30200	XD.T 11T3	5	132	~~324.84~~	46.00			
C211.32.R.04-11-A25-40	32	102	40	25	10	30200	XD.T 11T3	4	53204	~~306.00~~	46.00			
C211.32.R.05-11-A-50-165	32	165	50	32	10	20900	XD.T 11T3	5	332	~~324.84~~	46.00			
C211.32.R.04-11-A-64-250	32	250	64	32	10	8500	XD.T 11T3	4	432	~~306.00~~	44.00			

XDKT

Designation	IC mm	D1 mm	L mm	BS mm	S mm
XDKT 11T302..	6.8	2.8	10.6	2	3.80
XDKT 11T304..	6.8	2.8	10.6	1.8	3.80
XDKT 11T308..	6.8	2.8	10.6	1.4	3.80
XDKT 11T312..	6.8	2.8	10.6	1.4	3.80
XDKT 11T316..	6.8	2.8	10.6	1.4	3.80
XDKT 11T320..	6.8	2.8	10.6	1.4	3.80
XDKT 11T325..	6.8	2.8	10.6	1.4	3.80
XDKT 11T332..	6.8	2.8	10.6	1.4	3.80
XDKT 11T332..	6.8	2.8	10.6	0.8	3.80
XDKT 11T340..	6.8	2.8	10.6	-	3.80

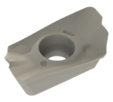


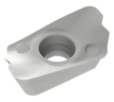
XDKT

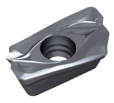
XDKT

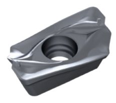
CERATIZIT \ Performance

TCS









ISO	-F20 CTWN215 XDKT 50 478 ... PG 1A/90	£	£	-F40 CTC5240 DRAGONSKIN XDKT 50 463 ... PG 1H/17	£	£	-M50 CTPP235 DRAGONSKIN XDKT 51 037 ... PG 1B/61	£	£	-M50 CTPM240 DRAGONSKIN XDKT 51 037 ... PG 1B/61	£	£
11T302FR	502	~~17.70~~	13.28									
11T304ER				504	~~18.13~~	15.41						
11T304FR	504	~~17.70~~	13.28									
11T304SR							104	~~14.09~~	10.57	404	~~14.09~~	10.57
11T308ER				500	~~18.13~~	15.41						
11T308FR	508	~~17.70~~	13.28									
11T308SR							108	~~14.09~~	10.57	408	~~14.09~~	10.57
11T312ER				512	~~18.13~~	15.41						
11T312SR							112	~~14.09~~	10.57	412	~~14.09~~	10.57
11T316ER				516	~~18.13~~	15.41						
11T320ER				520 1)	~~18.13~~	15.41						
11T320FR	520 1)	~~17.70~~	13.28									
11T320SR							120 1)	~~14.09~~	10.57	420 1)	~~14.09~~	10.57
11T325ER				525 1)	~~18.13~~	15.41						
11T325FR	525 1)	~~17.70~~	13.28									
11T325SR							125 1)	~~14.09~~	10.57			
11T332ER				532 1)	~~18.13~~	15.41						
11T332SR										432 1)	~~14.09~~	10.57
11T340ER				540 1)	~~18.13~~	15.41						
P							●			○		
M							○			●		
K	○						○					
N	●											
S				●								
H												
O	○											

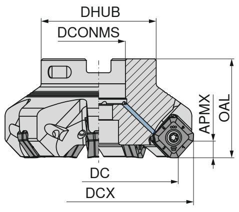
1) Insert radius >1.6 mm: Modify cutter body

MaxiMill – 271-12 Face mill

▲ 8 cutting edges per insert

κ = 47°

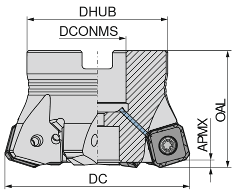
CERATIZIT \ Performance

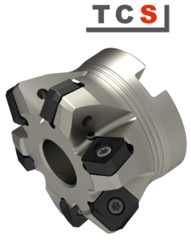


ISO designation	DC mm	DCX mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS $_{H6}$ mm	RPMX 1/min.	torque moment Nm	Insert	50 787 ... PG 2B/40	£	£	50 787 ... PG 2B/40	£	£
A271.40.R.04-12	40	53	4	6.8	40	38	16	17900	3,2	SOHU 1204.. / XOHU 1204..	**04004**	~~408.53~~	58.00			
A271.50.R.05-12	50	63	5	6.8	40	43	22	15200	3,2	SOHU 1204.. / XOHU 1204..	**05005**	~~418.75~~	60.00			
A271.63.R.07-12	63	76	7	6.8	40	48	22	13100	3,2	SOHU 1204.. / XOHU 1204..	**06307**	~~531.11~~	76.00			
A271.80.R.06-12	80	93	6	6.8	50	58	27	11300	3,2	SOHU 1204.. / XOHU 1204..				**08006**	~~531.11~~	76.00
A271.80.R.08-12	80	93	8	6.8	50	58	27	11300	3,2	SOHU 1204.. / XOHU 1204..	**08008**	~~612.79~~	88.00			
A271.100.R.07-12	100	113	7	6.8	63	78	32	9900	3,2	SOHU 1204.. / XOHU 1204..				**10007**	~~674.03~~	96.00
A271.100.R.10-12	100	113	10	6.8	63	78	32	9900	3,2	SOHU 1204.. / XOHU 1204..	**10010**	~~766.04~~	109.00			

MaxiMill – 271-12 HFC Face mill

CERATIZIT \ Performance

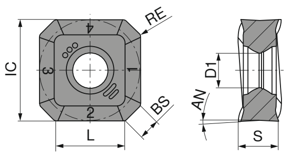




ISO designation	DC mm	ZNF	APMX mm	OAL mm	DHUB mm	DCONMS $_{H6}$ mm	RPMX 1/min.	torque moment Nm	Insert	50 788 ... PG 2B/40	£	£
A271.50.R.04-12-HFC	50	4	2.6	40	43	22	14600	3,2	SOHU 1204..	**05004**	~~418.75~~	60.00
A271.63.R.06-12-HFC	63	6	2.6	40	48	22	12500	3,2	SOHU 1204..	**06306**	~~531.11~~	76.00
A271.80.R.07-12-HFC	80	7	2.6	50	58	27	10800	3,2	SOHU 1204..	**08007**	~~612.79~~	88.00

SOHU

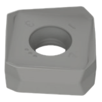
Designation	IC mm	D1 mm	L mm	BS mm	S mm
SOHU 1204AB..	13.36	4.4	8.8	1.7	5.00

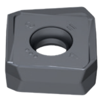


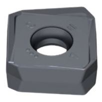
SOHU

SOHU

CERATIZIT \ Performance





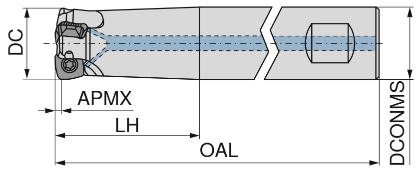


ISO	RE mm	-F50 CTC5240 DRAGONSKIN SOHU 51 140 ... PG 1H/17	£	£	-M50 CTPP235 DRAGONSKIN SOHU 51 138 ... PG 1B/61	£	£	-M50 CTPM240 DRAGONSKIN SOHU 51 138 ... PG 1B/61	£	£
1204ABSR	0.8	**17000**	~~31.77~~	27.00	**12000**	~~25.84~~	19.38	**42000**	~~25.84~~	19.38
P					●			○		
M					○			●		
K					○					
N										
S		●								
H										
O										

MaxiMill – HFC End milling cutter

TCS

CERATIZIT \ Performance



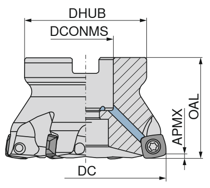
A

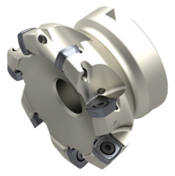
ISO designation	DC mm	OAL mm	LH mm	DCONMS h6 mm	APMX mm	RPMX 1/min.	Insert	ZNF	50 681 ... PG 2B/40	£	£	50 681 ... PG 2B/40	£	£
CHFC.16.R.02-06-A-40-200	16	200	40	16	0.8	4600	XPLX 0603..	2	716	~~231.03~~	35.00			
CHFC.16.R.02-06-B-40	16	89	40	16	0.8	17300	XPLX 0603..	2				616	~~231.03~~	35.00
CHFC.20.R.03-06-A-50-225	20	225	50	20	0.8	4200	XPLX 0603..	3	720	~~262.30~~	39.00			
CHFC.20.R.03-06-B-50	20	101	50	20	0.8	14500	XPLX 0603..	3				620	~~262.30~~	39.00
CHFC.25.R.02-09-A-50-225	25	225	50	25	1.0	9000	XDLX 09T3..	2	025	~~276.63~~	40.00			
CHFC.25.R.03-09-A-50-225	25	225	50	25	1.0	9000	XDLX 09T3..	3	125	~~296.97~~	42.00			
CHFC.25.R.04-06-A-50-225	25	225	50	25	0.8	4600	XPLX 0603..	4	725	~~293.56~~	44.00			
CHFC.25.R.04-06-B-50	25	107	50	25	0.8	15600	XPLX 0603..	4				625	~~293.56~~	44.00
CHFC.32.R.03-09-A-63-250	32	250	63	32	1.0	8100	XDLX 09T3..	3	032	~~310.20~~	44.00			
CHFC.32.R.02-12-A-63-250	32	250	63	32	2.0	6480	XOLX 1204..	2	132	~~290.16~~	41.00			
CHFC.32.R.05-06-A-25-60-225	32	225	60	25	0.8	3900	XPLX 0603..	5	732	~~324.84~~	49.00			
CHFC.32.R.05-06-B-25-60	32	117	60	25	0.8	11000	XPLX 0603..	5				632	~~324.84~~	49.00
CHFC.35.R.03-12-A-63-250	35	250	63	32	2.0	6480	XOLX 1204..	3	035	~~310.20~~	44.00			

MaxiMill – HFC Shell mill

TCS

CERATIZIT \ Performance



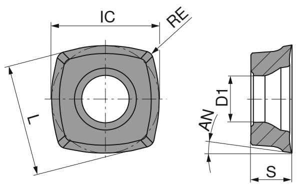


ISO designation	DC mm	OAL mm	DCONMS H6 mm	DHUB mm	APMX mm	RPMX 1/min.	Insert	ZNF	50 683 ... PG 2B/40	£	£
AHFC.32.R.03-09	32	40	16	38	1	27700	XDLX 09T3..	3	032	~~310.20~~	44.00
AHFC.35.R.04-09	35	40	16	38	1	26700	XDLX 09T3..	4	035	~~330.46~~	47.00
AHFC.40.R.04-09	40	40	16	38	1	26400	XDLX 09T3..	4	140	~~343.98~~	49.00
AHFC.42.R.05-09	42	40	16	38	1	26100	XDLX 09T3..	5	142	~~364.12~~	52.00
AHFC.50.R.05-09	50	40	22	43	1	23500	XDLX 09T3..	5	150	~~404.71~~	58.00
AHFC.52.R.06-09	52	40	22	43	1	23000	XDLX 09T3..	6	152	~~424.96~~	61.00
AHFC.63.R.06-09	63	40	22	48	1	20500	XDLX 09T3..	6	163	~~465.35~~	66.00
AHFC.66.R.07-09	66	40	22	48	1	20000	XDLX 09T3..	7	16600	~~485.59~~	73.00
AHFC.40.R.03-12	40	40	16	38	2	21120	XOLX 1204..	3	040	~~323.84~~	46.00
AHFC.42.R.04-12	42	40	16	38	2	20880	XOLX 1204..	4	042	~~343.98~~	49.00
AHFC.50.R.04-12	50	40	22	43	2	18800	XOLX 1204..	4	050	~~384.37~~	55.00
AHFC.52.R.05-12	52	40	22	43	2	18400	XOLX 1204..	5	052	~~404.71~~	58.00
AHFC.63.R.05-12	63	40	22	48	2	16400	XOLX 1204..	5	063	~~445.01~~	64.00
AHFC.66.R.06-12	66	40	22	48	2	16000	XOLX 1204..	6	066	~~465.35~~	66.00

XPLX

TCS

CERATIZIT \ Performance



-F40
CTC5240
DRAGONSKIN

XPLX

-M50
CTPP235
DRAGONSKIN

XPLX

-M50
CTPM240
DRAGONSKIN

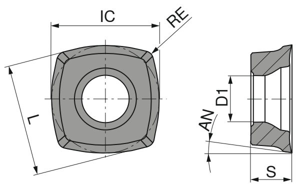
XPLX

ISO	RE mm	IC mm	D1 mm	L mm	AN °	S mm	50 518 ... PG 1H/17	£	£	51 019 ... PG 1B/61	£	£	51 019 ... PG 1B/61	£	£
060305ER	0.5	6.35	2.8	6	11	2.75	558	~~15.09~~	12.83						
060305SR	0.5	6.35	2.8	6	11	2.75				105	~~12.37~~	9.28	405	~~12.37~~	9.28

XDLX

TCS

CERATIZIT \ Performance



-F40
CTC5240
DRAGONSKIN

XDLX

-M50
CTPP235
DRAGONSKIN

XDLX

-M50
CTPM240
DRAGONSKIN

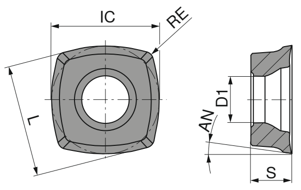
XDLX

ISO	RE mm	IC mm	D1 mm	L mm	AN °	S mm	50 503 ... PG 1H/17	£	£	51 016 ... PG 1B/61	£	£	51 016 ... PG 1B/61	£	£
09T308ER	0.8	9.52	4.4	9	15	3.97	558	~~15.39~~	13.08						
09T308SR	0.8	9.52	4.4	9	15	3.97				108	~~12.75~~	9.56	408	~~12.75~~	9.56

XOHX / XOLX

TCS

CERATIZIT \ Performance



-F50
CTC5240
DRAGONSKIN

XOHX

-M50
CTPP235
DRAGONSKIN

XOLX

-M50
CTPM240
DRAGONSKIN

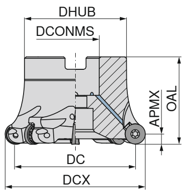
XOLX

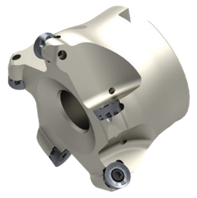
ISO	RE mm	IC mm	D1 mm	L mm	AN °	S mm	51 124 ... PG 1H/17	£	£	51 017 ... PG 1B/61	£	£	51 017 ... PG 1B/61	£	£
120410SR	1.0	12.7	5.5	12	10	4.76	16000	~~23.40~~	19.89	110	~~15.29~~	11.47	410	~~15.29~~	11.47

	51 124 ...	51 017 ... 110	51 017 ... 410
P		●	○
M		○	●
K		○	
N			
S	●		
H			
O			

MaxiMill – 251 RS Shell mill

CERATIZIT \ Performance

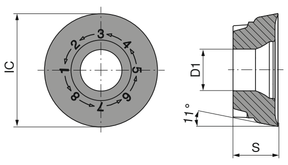




ISO designation	DCX mm	DC mm	OAL mm	APMX mm	DHUB mm	DCONMS H6 mm	RPMX 1/min.	Insert	ZNF	50 686 ...	£	PG 2B/40 £
A251.40.R.05-10-RS	40	30	40	5	38	16	16000	RP.X 10T3..	5	140	~~356.51~~	51.00
A251.42.R.06-10-RS	42	32	40	5	38	16	16000	RP.X 10T3..	6	142	~~409.73~~	59.00
A251.50.R.06-10-RS	50	40	40	5	43	22	12500	RP.X 10T3..	6	150	~~423.97~~	61.00
A251.52.R.06-10-RS	52	42	40	5	43	22	12500	RP.X 10T3..	6	152	~~423.97~~	61.00
A251.40.R.04-12-RS	40	28	40	6	38	16	15900	RP.X 1204..	4	340	~~327.94~~	47.00
A251.50.R.05-12-RS	50	38	40	6	43	22	12500	RP.X 1204..	5	050	~~398.00~~	57.00
A251.52.R.05-12-RS	52	40	40	6	43	22	12500	RP.X 1204..	5	052	~~417.45~~	63.00
A251.63.R.06-12-RS	63	51	40	6	48	22	10000	RP.X 1204..	6	063	~~491.42~~	70.00
A251.66.R.07-12-RS	66	54	40	6	48	22	9000	RP.X 1204..	7	166	~~518.08~~	78.00
A251.80.R.07-12-RS	80	68	50	6	58	27	8000	RP.X 1204..	7	080	~~554.36~~	79.00

RPHX / RPNX

Designation	IC mm	D1 mm	S mm
RP.X 10T3..	10	3.4	3.97
RP.X 1204..	12	4.4	4.76

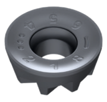


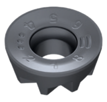
RPHX / RPNX

CERATIZIT \ Performance


RPHX


RPNX


RPHX


RPHX

ISO	-M31 CTC5240 DRAGONSKIN RPHX 50 493 ...	£	PG 1H/17 £	-M50 CTPP235 DRAGONSKIN RPNX 51 054 ...	£	PG 1B/61 £	-F50 CTPP235 DRAGONSKIN RPHX 51 051 ...	£	PG 1B/61 £	-M50 CTPM240 DRAGONSKIN RPHX 51 050 ...	£	PG 1B/61 £
10T3M4EN	550 [1]	~~16.23~~	13.80									
10T3M8EN	551	~~16.23~~	13.80									
10T3M8SN				12000	~~9.79~~	7.34	12000	~~12.85~~	9.64	420	~~12.85~~	9.64
1204M4EN	552 [1]	~~17.88~~	15.20									
1204M6EN	56200	~~17.88~~	15.20									
1204M8EN	582	~~17.88~~	15.20									
1204M8SN				125	~~11.25~~	8.44	125	~~14.09~~	10.57	425	~~14.09~~	10.57

	-M31 CTC5240	-M50 CTPP235	-F50 CTPP235	-M50 CTPM240
P		●	●	○
M		○	○	●
K		○	○	
N				
S	●			
H				
O				

1) Insert with 4 indexes

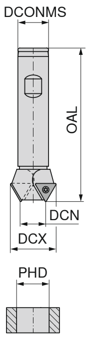
Indexable chamfer milling 90°

Scope of supply:

Indexable insert countersink including clamping screws

WPS

KOMET \ Performance



DCX mm	DCN mm	PHD mm	ZEFP	DCONMS mm	OAL mm	Insert	30 196 ...	PG U1 £	£
19	7	9.5	2	16	100	TOHX 090204	**19000**	~~404.93~~	50.00
23	11	12.0	2	16	100	TOHX 090204	**23000**	~~410.58~~	50.00
26	11	12.0	1	16	100	TOHX 090204	**26000**	~~414.39~~	50.00
30	12	13.0	2	20	100	TOHX 140305	**30000**	~~433.31~~	50.00
34	16	17.0	2	20	100	TOHX 140305	**34000**	~~440.78~~	50.00
37	19	20.0	2	20	100	TOHX 140305	**37000**	~~440.78~~	50.00

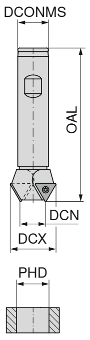
Indexable chamfer milling 60°

Scope of supply:

Indexable insert countersink including clamping screws

WPS

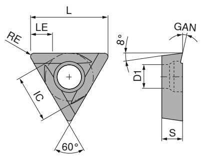
KOMET \ Performance

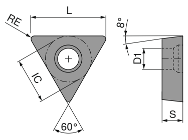


DCX mm	DCN mm	PHD mm	ZEFP	DCONMS mm	OAL mm	Insert	30 197 ...	PG U1 £	£
16.5	8.1	8.5	1	16	100	TOHX 090204	**16500**	~~410.58~~	50.00
20.0	11.6	12.0	2	16	100	TOHX 090204	**20000**	~~414.39~~	50.00
22.0	13.6	14.0	2	16	100	TOHX 090204	**22000**	~~433.31~~	50.00
23.5	15.1	15.5	2	16	100	TOHX 090204	**23500**	~~440.78~~	50.00
25.5	17.1	17.5	2	16	100	TOHX 090204	**25500**	~~440.78~~	50.00

TOHX

Designation	L mm	S mm	D1 mm	IC mm
TOHX 06T1..	6.50	1.80	2.2	4.0
TOHX 0902..	9.12	2.50	2.8	5.6
TOHX 1403..	13.62	3.00	3.8	8.2





TOHX

KOMET \ Performance

ISO	RE mm	-G12 BK8425 ○ F 62 603 ...	PG 1A/3# £	£	-G12 BK8425 ○ F 62 603 ...	PG 1A/3# £	£
06T103EL	0.3				**30200**	~~18.97~~	14.23
090204EL	0.4				**31800**	~~21.46~~	16.10
090204EN	0.4	**31400**	~~22.10~~	16.58			
140304EL	0.4				**32600**	~~24.19~~	18.14
P		●			●		
M		●			●		
K		●			●		
N							
S		●			●		
H		○			○		
O							

CERATIZIT worldwide

CERATIZIT Group

▲ Headquarters

▲ Production & Sales

△ Production

▲ Sales

CB-CERATIZIT

▲ Production & Sales

△ Production

▲ Sales

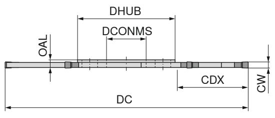
MaxiMill – Slot-SX side and face milling cutter

Scope of supply:

Side and face milling cutters **without** assembly key, **without** clamping screws

Direct Cooling | κ = 90°

CERATIZIT \ Performance



NEW

Designation	DC	CW	CDX	DCONMS H6	DHUB	OAL	ZEFP	Insert	Adapter	50 383 ...		PG 2B/40
	mm	mm	mm	mm	mm	mm					£	£
ASLOT.80.R.6.13.DC-SX2	80	2	23	13	32	1.65	6	SX E2 ..	AD.SLOT.13...	08002	~~484.50~~	73.00
ASLOT.80.R.6.13.DC-SX3	80	3	23	13	32	2.50	6	SX E3 ..	AD.SLOT.13...	08003	~~484.50~~	73.00
ASLOT.80.R.4.13.DC-SX4	80	4	23	13	32	3.50	4	SX E4 ..	AD.SLOT.13...	08004	~~484.50~~	73.00
ASLOT.80.R.4.13.DC-SX5	80	5	23	13	32	4.50	4	SX E5 ..	AD.SLOT.13...	08005	~~484.50~~	73.00

Ejector SX

Spare parts **for Article no.**	£	70 950 ...
50 383 08002	25.00	836
50 383 08003	25.00	836
50 383 08004	25.00	837
50 383 08005	25.00	837

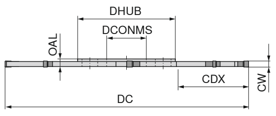
MaxiMill – Slot-SX side and face milling cutter

Scope of supply:

Side and face milling cutters **without** assembly key, **without** clamping screws

Direct Cooling | κ = 90°

CERATIZIT \ Performance



NEW

Designation	DC	CW	CDX	DCONMS H6	DHUB	OAL	ZEFP	Insert	Adapter	50 384 ...		PG 2B/40
	mm	mm	mm	mm	mm	mm					£	£
ASLOT.100.R.8.22.DC-SX2	100	2	29	22	40	1.65	8	SX E2 ..	AD.SLOT.22...	10002	~~646.00~~	97.00
ASLOT.100.R.8.22.DC-SX3	100	3	29	22	40	2.50	8	SX E3 ..	AD.SLOT.22...	10003	~~646.00~~	97.00
ASLOT.100.R.6.22.DC-SX4	100	4	29	22	40	3.50	6	SX E4 ..	AD.SLOT.22...	10004	~~646.00~~	97.00
ASLOT.100.R.6.22.DC-SX5	100	5	29	22	40	4.50	6	SX E5 ..	AD.SLOT.22...	10005	~~646.00~~	97.00
ASLOT.100.R.4.22.DC-SX6	100	6	29	22	40	5.40	4	SX E6 ..	AD.SLOT.22...	10006	~~646.00~~	97.00

Ejector SX

Spare parts **for Article no.**	£	70 950 ...
50 384 10002	25.00	836
50 384 10003	25.00	836
50 384 10004	25.00	837
50 384 10005	25.00	837
50 384 10006	25.00	837

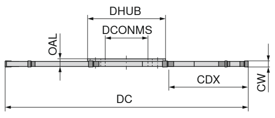
MaxiMill – Slot-SX side and face milling cutter

Scope of supply:

Side and face milling cutters **without** assembly key, **without** clamping screws

Direct Cooling | κ = 90°

CERATIZIT \ Performance



NEW

Designation	DC	CW	CDX	DCONMS H6	DHUB	OAL	ZEFP	Insert	Adapter	50 385 ...		PG 2B/40
	mm	mm	mm	mm	mm	mm					£	£
ASLOT.125.R.10.22.DC-SX2	125	2	30	22	40	1.65	10	SX E2 ..	AD.SLOT.22...	12502	~~807.50~~	121.00
ASLOT.125.R.10.22.DC-SX3	125	3	30	22	40	2.50	10	SX E3 ..	AD.SLOT.22...	12503	~~807.50~~	121.00

Ejector SX

Spare parts **for Article no.**	£	70 950 ...
50 385 12502	25.00	836
50 385 12503	25.00	836

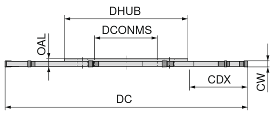
MaxiMill – Slot-SX side and face milling cutter

Scope of supply:

Side and face milling cutters **without** assembly key, **without** clamping screws

Direct Cooling | κ = 90°

CERATIZIT \ Performance



NEW

Designation	DC mm	CW mm	CDX mm	DCONMS H6 mm	DHUB mm	OAL mm	ZEFP	Insert	Adapter	50 386 ...	£	PG 2B/40 £
ASLOT.125.R.10.32.DC-SX2	125	2	30	32	63	1.65	10	SX E2 ..	AD.SLOT.32...	**12502**	~~807.50~~	121.00
ASLOT.125.R.10.32.DC-SX3	125	3	30	32	63	2.50	10	SX E3 ..	AD.SLOT.32...	**12503**	~~807.50~~	121.00
ASLOT.125.R.8.32.DC-SX4	125	4	30	32	63	3.50	8	SX E4 ..	AD.SLOT.32...	**12504**	~~807.50~~	121.00
ASLOT.125.R.8.32.DC-SX5	125	5	30	32	63	4.50	8	SX E5 ..	AD.SLOT.32...	**12505**	~~807.50~~	121.00
ASLOT.125.R.8.32.DC-SX6	125	6	30	32	63	5.40	8	SX E6 ..	AD.SLOT.32...	**12506**	~~807.50~~	121.00

Ejector SX

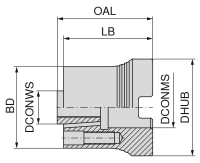
Spare parts **for Article no.**	£	**70 950 ...**
50 386 12502	25.00	**836**
50 386 12503	25.00	**836**
50 386 12504	25.00	**837**
50 386 12505	25.00	**837**
50 386 12506	25.00	**837**

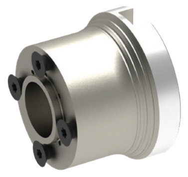
MaxiMill – Slot-SX multipurpose milling cutter adapter

Scope of supply:

Multipurpose milling cutter adapter including screws

CERATIZIT \ Performance





NEW

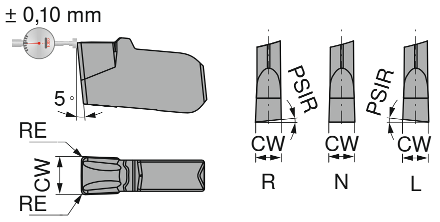
Designation	DCONMS mm	DCONWS h6 mm	LB mm	OAL mm	BD mm	50 395 ...	£	PG 2E/45 £
AD.SLOT.13.32.A16	16	13	35	37.5	32	**01300**	~~151.24~~	23.00
AD.SLOT.22.40.A22	22	22	35	37.5	40	**02200**	~~155.23~~	23.00
AD.SLOT.32.63.A27	27	32	45	47.5	63	**03200**	~~169.48~~	25.00
AD.SLOT.40.80.A32.SK	32	40	55	57.5	80	**04000**	~~214.70~~	32.00
AD.SLOT.40.80.A32.ZK	32	40	55	57.5	80	**04100**	~~214.70~~	32.00

Insert SX

▲ Specially developed geometry with negative edge-chamfers available in right, left and neutral types

F	M	R

CERATIZIT \ Performance

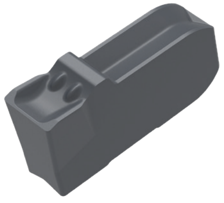


TCS

-M1

CTP1340

DRAGONSKIN



Designation	IH	CW +/-0,05 mm	for tool holder	70 342 ...	£	PG 1C/72 £
SX E2.00 N 0.20	N	2	-SX2	**622**	~~12.11~~	9.08
SX E3.00 N 0.20	N	3	-SX3	**623**	~~12.88~~	9.66
SX E4.00 N 0.30	N	4	-SX4	**624**	~~13.58~~	10.19
SX E5.00 N 0.30	N	5	-SX5	**625**	~~14.46~~	10.85
SX E6.00 N 0.40	N	6	-SX6	**626**	~~15.59~~	11.69

P	●
M	●
K	●
N	○
S	●
H	
O	○

ADAPTERS AND ACCESSORIES

Centro-P – highest performance and accuracy for all milling and drilling applications.

Standard Line – range of tools to support all standard applications.

BT-FC – face and taper contact. For highest stability and process security in compatible machines.

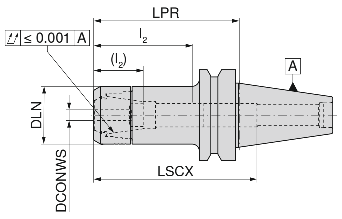
ER Precision Collet chuck – Centro-P

- ▲ for standard or sealed nuts
- ▲ maximum size collet to ISO tolerance field H10
- ▲ for clamping a roll key is required
- ▲ p_{max} = 80 bar
- ▲ also available with Balluff chip **on request**

Scope of supply:

Holder **without** nut, **without** backstop

Centro-P WNT \ Performance



AD

G 2,5 n_{max} 25000

Adapter	DCONWS mm	LPR mm	DLN mm	LSCX mm	l_2 (l_2) mm	for collet	84 524 ... PG Y8	£	£
BT 40	1 - 10	75	30	90	38 - 53 (29 - 39)	426E (ER16)	**210**	~~153.95~~	59.00
BT 40	1 - 10	90	30	120	30 - 50 (29 - 36)	426E (ER16)	**310**	~~182.43~~	69.00
BT 40	1 - 10	120	30	140	29 - 45 (29 - 35)	426E (ER16)	**410**	~~248.41~~	95.00
BT 40	1 - 10	150	30	180	29 - 45 (29 - 32)	426E (ER16)	**510**	~~267.81~~	102.00
BT 40	2 - 16	60	40	92	44 - 64 (36 - 46)	430E (ER25)	**116**	~~174.67~~	67.00
BT 40	2 - 16	75	40	100	42 - 59 (36 - 41)	430E (ER25)	**216**	~~153.95~~	59.00
BT 40	2 - 16	90	40	91	42 - 59 (36 - 41)	430E (ER25)	**316**	~~182.43~~	69.00
BT 40	2 - 16	120	40	91	40 - 65 (36 - 47)	430E (ER25)	**416**	~~267.81~~	102.00
BT 40	2 - 16	150	40	100	40 - 64 (36 - 45)	430E (ER25)	**516**	~~287.22~~	109.00
BT 40	2 - 16	200	40	150	40 - 64 (36 - 45)	430E (ER25)	**616**	~~329.90~~	126.00
BT 40	2 - 20	60	50	55	45 - 64 (42 - 46)	470E (ER32)	**120**	~~174.67~~	67.00
BT 40	2 - 20	75	50	100	42 - 76 (42 - 52)	470E (ER32)	**220**	~~153.95~~	59.00
BT 40	2 - 20	90	50	100	42 - 76 (42 - 52)	470E (ER32)	**320**	~~182.43~~	69.00
BT 40	2 - 20	120	50	110	42 - 71 (42 - 53)	470E (ER32)	**420**	~~267.81~~	102.00
BT 40	2 - 20	150	50	110	42 - 71 (42 - 53)	470E (ER32)	**520**	~~287.22~~	109.00

LSCX = clamping depth without back stop screw for shanks
l_2 = with back stop screw 1, dimension in brackets ( ) = with back stop screw 2
dimension LPR when using tightening nuts with seals 4 mm longer

Roll key

- ▲ Version CP = for Centro-P lock nuts
- ▲ Version STD = for standard lock nuts
- ▲ Version HDC = for HDC lock nuts

WNT \ Performance

for lock nut	DLN mm	84 950 ... PG Y8	£	£
426E / ER 16 CP	30	**027**	~~120.75~~	46.00
430E / ER 25 CP	40	**054**	~~141.55~~	54.00
470E / ER 32 CP + STD / OZ 462E CP	50	**056**	~~132.71~~	51.00

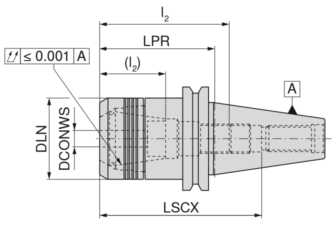
ER Precision Collet chuck – Centro-P

- ▲ for standard or sealed nuts
- ▲ maximum size collet to ISO tolerance field H10
- ▲ for clamping a roll key is required
- ▲ p_{max} = 80 bar
- ▲ also available with Balluff chip **on request**

Scope of supply:

Holder **without** nut, **without** backstop

Centro-P WNT \ Performance



AD/B

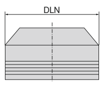
G 2,5 n_{max} 25000

Adapter	DCONWS mm	LPR mm	DLN mm	LSCX mm	l_2 (l_2) mm	for collet	84 414 ... PG Y8	£	£
SK 40	1 - 10	130	30	140	28 - 50 (14 - 34)	426E (ER16)	**510**	~~252.32~~	96.00
SK 40	1 - 10	160	30	200	28 - 45 (16 - 31)	426E (ER16)	**910**	~~278.47~~	106.00
SK 40	2 - 16	45	40	85	35 - 60 (20 - 42)	430E (ER25)	**816**	~~229.14~~	87.00
SK 40	2 - 16	130	40	140	38 - 67 (21 - 49)	430E (ER25)	**516**	~~274.22~~	104.00
SK 40	2 - 16	160	40	118	35 - 60 (20 - 42)	430E (ER25)	**916**	~~288.89~~	110.00
SK 40	2 - 20	130	50	114	50 - 74 (36 - 55)	470E (ER32)	**620**	~~274.22~~	104.00
SK 40	2 - 20	160	50	119	52 - 70 (32 - 52)	470E (ER32)	**920**	~~288.89~~	110.00
SK 50	2 - 20	100	50	150	53 - 81 (35 - 63)	470E (ER32)	**520**	~~469.35~~	179.00
SK 50	2 - 20	160	50	200	53 - 83 (35 - 65)	470E (ER32)	**720**	~~764.51~~	291.00

Your local Technical Sales Engineer carries a Demo Kit in his car - ASK FOR A DEMO

ER standard lock nut for precision collet chucks – Centro-P

WNT \ Performance



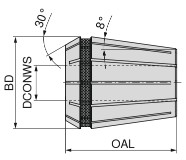
for seals

for collet	DCONWS mm	DLN mm	TQX Nm	84 950 ... PG Y8	£	£
426E (ER16)	1 - 10	30	80	**001**	~~59.59~~	23.00
430E (ER25)	2 - 16	40	90	**003**	~~66.21~~	25.00
470E (ER32)	2 - 20	50	180	**005**	~~72.83~~	28.00

ER precision collet for precision collet chucks – Centro-P

- ▲ DIN ISO 15488-B (old DIN 6499-B)
- ▲ 12 times slotted
- ▲ Double taper collet
- ▲ Coloured ring as identification of precision collet
- ▲ ER08: 5 µm runout and repeatability
- ▲ Coated precision collet

ER-B 2 µm WNT \ Performance



DCONWS mm	84 596 ... PG Y8 BD = 17 OAL = 27.5 426 E / ER16	£	£	84 597 ... PG Y8 BD = 26 OAL = 34 430 E / ER25	£	£	84 598 ... PG Y8 BD = 33 OAL = 40 470 E / ER32	£	£
1.0	**010**	~~98.94~~	38.00						
1.1	**011**	~~176.97~~	67.00						
1.2	**012**	~~176.97~~	67.00						
1.4	**014**	~~176.97~~	67.00						
1.5	**015**	~~98.94~~	38.00						
1.6	**016**	~~176.97~~	67.00						
1.8	**018**	~~176.97~~	67.00						
2.0	**020**	~~84.51~~	32.00	**020**	~~87.49~~	33.00	**020**	~~89.48~~	34.00
2.2	**022**	~~157.08~~	60.00						
2.4	**024**	~~157.08~~	60.00						
2.5	**025**	~~84.51~~	32.00	**025**	~~87.49~~	33.00			
2.6	**026**	~~157.08~~	60.00						
2.8	**028**	~~157.08~~	60.00						
3.0	**030**	~~71.58~~	27.00	**030**	~~73.58~~	28.00	**030**	~~74.58~~	28.00
3.2	**032**	~~139.20~~	53.00						
3.4	**034**	~~123.24~~	47.00						
3.5	**035**	~~91.13~~	35.00	**035**	~~95.47~~	36.00			
3.6	**036**	~~139.20~~	53.00						
3.8	**038**	~~139.20~~	53.00						
4.0	**040**	~~71.58~~	27.00	**040**	~~73.58~~	28.00	**040**	~~74.58~~	28.00
4.5	**045**	~~91.13~~	35.00	**045**	~~95.47~~	36.00			
5.0	**050**	~~71.58~~	27.00	**050**	~~73.58~~	28.00	**050**	~~74.58~~	28.00
5.5	**055**	~~91.13~~	35.00	**055**	~~95.47~~	36.00			
5.6	**056**	~~139.20~~	53.00						
6.0	**060**	~~71.58~~	27.00	**060**	~~73.58~~	28.00	**060**	~~74.58~~	28.00
6.3	**063**	~~139.20~~	53.00						
6.5	**065**	~~91.13~~	35.00	**065**	~~95.47~~	36.00			
7.0	**070**	~~71.58~~	27.00	**070**	~~73.58~~	28.00	**070**	~~74.58~~	28.00
7.1	**071**	~~139.20~~	53.00						
7.5	**075**	~~91.13~~	35.00	**075**	~~95.47~~	36.00			
8.0	**080**	~~71.58~~	27.00	**080**	~~73.58~~	28.00	**080**	~~74.58~~	28.00
8.5	**085**	~~91.13~~	35.00	**085**	~~95.47~~	36.00			
9.0	**090**	~~71.58~~	27.00	**090**	~~73.58~~	28.00	**090**	~~74.58~~	28.00
9.5	**095**	~~91.13~~	35.00	**095**	~~95.47~~	36.00			
10.0	**100**	~~71.58~~	27.00	**100**	~~73.58~~	28.00	**100**	~~74.58~~	28.00
10.5				**105**	~~95.47~~	36.00			
11.0				**110**	~~73.58~~	28.00	**110**	~~74.58~~	28.00
11.5				**115**	~~95.47~~	36.00			
12.0				**120**	~~73.58~~	28.00	**120**	~~74.58~~	28.00
12.5				**125**	~~95.47~~	36.00			
13.0				**130**	~~73.58~~	28.00	**130**	~~74.58~~	28.00
13.5				**135**	~~95.47~~	36.00			
14.0				**140**	~~73.58~~	28.00	**140**	~~74.58~~	28.00
14.5				**145**	~~95.47~~	36.00			
15.0				**150**	~~73.58~~	28.00	**150**	~~74.58~~	28.00
15.5				**155**	~~95.47~~	36.00			
16.0				**160**	~~73.58~~	28.00	**160**	~~74.58~~	28.00
17.0							**170**	~~74.58~~	28.00
18.0							**180**	~~74.58~~	28.00
19.0							**190**	~~74.58~~	28.00
20.0							**200**	~~74.58~~	28.00

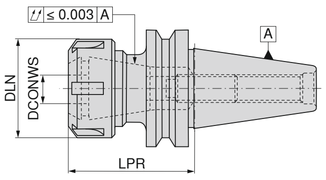
Clamping range covered: H10 corresponding to shank Ø DCONWS

ER-Collet chuck

▲ also available with Balluff chip **on request**

Scope of supply:
Holder with lock nut and adjustable back stop

WNT \ Standard



AD/B
G 2,5 n_{max} 25000

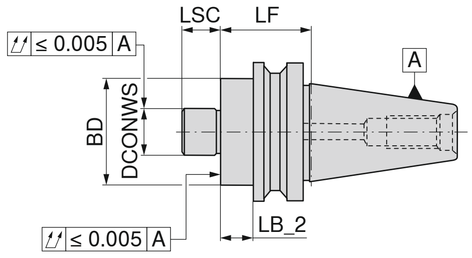
Version	Adapter	DCONWS mm	LPR mm	DLN mm	TQX Nm	for collet	82 509 ... PG Y8	£	£
short	BT 40	1 - 10	60	32	56	426E (ER16)	110	~~92.69~~	35.00
	BT 40	1 - 16	70	42	104	430E (ER25)	116	~~97.20~~	37.00
	BT 40	2 - 20	70	50	136	470E (ER32)	120	~~97.20~~	37.00
	BT 40	3 - 26	70	63	176	472E (ER40)	126	~~102.60~~	39.00
medium length	BT 40	1 - 10	120	32	56	426E (ER16)	410	~~105.96~~	40.00
	BT 40	1 - 16	120	42	104	430E (ER25)	416	~~105.96~~	40.00
	BT 40	2 - 20	120	50	136	470E (ER32)	420	~~105.96~~	40.00

Shell mill adapter

▲ With fixed drive dogs and enlarged contact face for milling cutters with transverse groove
▲ also available with Balluff chip **on request**

Scope of supply:
Toolholder with clamping screw

WNT \ Standard



AD/B
G 2,5 n_{max} 25000

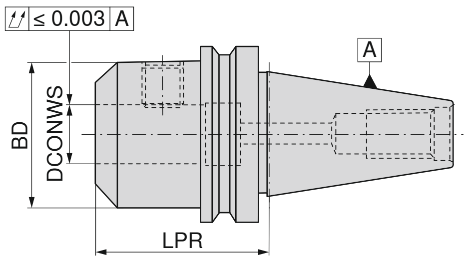
Version	Adapter	DCONWS mm	LB_2 mm	LF mm	BD mm	LSC mm	82 514 ... PG Y8	£	£
short	BT 40	16	25	52	38	17	116	~~120.32~~	46.00
	BT 40	22	25	52	48	19	122	~~130.92~~	50.00
	BT 40	27	25	52	58	21	127	~~132.43~~	50.00
	BT 40	32	23	50	78	24	132	~~139.71~~	53.00
	BT 40	40	23	50	88	27	140 1)	~~151.83~~	58.00

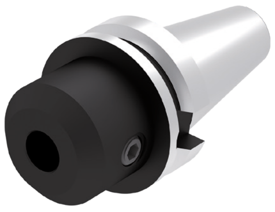
1) with cross screw and 4 holes M12, Pitch Circle diameter = 66.7 mm, coolant outlet on the outer diameter of the spigot (DCONWS)!

Cylindrical shank adapter (Weldon)

▲ For shanks according to DIN 6535 HB / 1835 B with lateral clamping flat
▲ also available with Balluff chip **on request**

WNT \ Standard





AD/B
G 2,5 n_{max} 25000

AD/Be
G 2,5 n_{max} 25000

Version	Adapter	DCONWS H4 mm	LPR mm	BD mm	82 501 ... PG Y8	£	£	82 504 ... PG Y8	£	£
short	BT 40	6	50	25	106	~~92.69~~	35.00	106	~~132.44~~	50.00
	BT 40	8	50	28	108	~~92.69~~	35.00	108	~~132.44~~	50.00
	BT 40	10	63	35	110	~~92.69~~	35.00	110	~~132.44~~	50.00
	BT 40	12	63	42	112	~~92.69~~	35.00	112	~~132.44~~	50.00
	BT 40	14	63	44	114	~~92.69~~	35.00	114	~~132.44~~	50.00
	BT 40	16	63	48	116	~~92.69~~	35.00	116	~~132.44~~	50.00
	BT 40	18	63	50	118	~~92.69~~	35.00	118	~~132.44~~	50.00
	BT 40	20	63	52	120	~~92.69~~	35.00	120	~~132.44~~	50.00
	BT 40	25	100	65	125	~~92.69~~	35.00			
	BT 40	32	100	72	132 1)	~~105.96~~	40.00			
medium length	BT 40	6	100	25	506	~~99.31~~	38.00			
	BT 40	8	100	28	508	~~99.31~~	38.00			
	BT 40	10	100	35	510	~~99.31~~	38.00			
	BT 40	12	100	42	512	~~99.31~~	38.00			
	BT 40	14	100	44	514	~~99.31~~	38.00			
	BT 40	16	100	48	516	~~136.12~~	52.00			
	BT 40	18	100	50	518	~~99.31~~	38.00			
	BT 40	20	100	52	520	~~136.12~~	52.00			
extra-long	BT 40	6	160	25	606	~~105.96~~	40.00			
	BT 40	8	160	28	608	~~105.96~~	40.00			
	BT 40	10	160	35	610	~~105.96~~	40.00			
	BT 40	12	160	42	612	~~105.96~~	40.00			
	BT 40	14	160	44	614	~~105.96~~	40.00			
	BT 40	16	160	48	616	~~105.96~~	40.00			
	BT 40	18	160	50	618	~~105.96~~	40.00			
	BT 40	20	160	52	620	~~105.96~~	40.00			
	BT 40	25	160	65	625 1)	~~105.96~~	40.00			

1) Version with two grubscrews

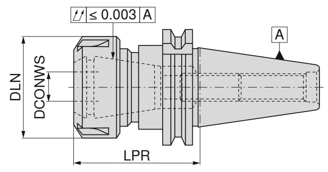
Spare parts can be found in → **Chapter 16 Adapters and accessoires in the clamping technology catalogue.**

ER Collet chuck

▲ also available with Balluff chip **on request**

Scope of supply:
Holder with lock nut and adjustable back stop

WNT \ Standard



AD/B
G 2,5 n_{max} 25000

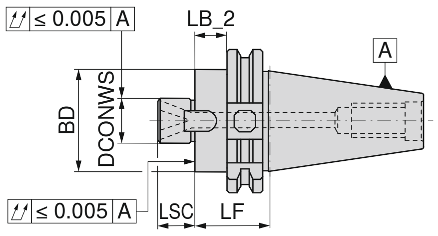
Version	Adapter	DCONWS	LPR	DLN	TQX	for collet	82 415 ...	PG Y8	
		mm	mm	mm	Nm			£	£
short	SK 40	1 - 10	60	32	56	426E (ER16)	110	~~92.69~~	35.00
	SK 40	1 - 16	70	42	104	430E (ER25)	116	~~97.20~~	37.00
	SK 40	2 - 20	70	50	136	470E (ER32)	120	~~97.20~~	37.00
	SK 40	3 - 26	70	63	176	472E (ER40)	126	~~102.60~~	39.00
medium length	SK 40	1 - 10	120	32	56	426E (ER16)	410	~~105.96~~	40.00
	SK 40	1 - 16	120	42	104	430E (ER25)	416	~~105.96~~	40.00
	SK 40	2 - 20	120	50	136	470E (ER32)	420	~~105.96~~	40.00

Shell mill adapter

▲ Screwed drive dogs
▲ also available with Balluff chip **on request**

Scope of supply:
Toolholder with clamping screw

WNT \ Standard



AD/B
G 2,5 n_{max} 25000

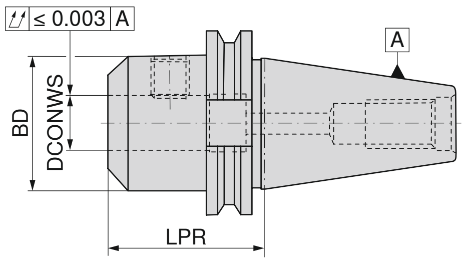
Version	Adapter	DCONWS	LB_2	LF	BD	LSC	82 428 ...	PG Y8	
		mm	mm	mm	mm	mm		£	£
short	SK 40	16	25	44	38	17	116	~~120.32~~	46.00
	SK 40	22	25	44	48	19	122	~~130.92~~	50.00
	SK 40	27	36	55	58	21	127	~~132.43~~	50.00
	SK 40	32	31	50	78	24	132	~~139.71~~	53.00
	SK 40	40	31	50	88	27	140 1)	~~151.83~~	58.00

1) with cross screw and 4 holes M12, Pitch Circle diameter = 66.7 mm, coolant outlet on the outer diameter of the spigot (DCONWS)!

Cylindrical shank adapter (Weldon)

▲ For shanks according to DIN 6535 HB / 1835 B with lateral clamping flat
▲ also available with Balluff chip **on request**

WNT \ Standard



AD/B
G 2,5 n_{max} 25000

AD/Be
G 2,5 n_{max} 25000

Version	Adapter	DCONWS $_{H4}$	LPR	BD	82 401 ...	PG Y8		82 404 ...	PG Y8	
		mm	mm	mm		£	£		£	£
short	SK 40	6	50	25	106	~~92.69~~	35.00	106	~~132.44~~	50.00
	SK 40	8	50	28	108	~~92.69~~	35.00	108	~~132.44~~	50.00
	SK 40	10	50	35	110	~~92.69~~	35.00	110	~~132.44~~	50.00
	SK 40	12	50	42	112	~~92.69~~	35.00	112	~~132.44~~	50.00
	SK 40	14	50	44	114	~~92.69~~	35.00	114	~~132.44~~	50.00
	SK 40	16	63	48	116	~~92.69~~	35.00	116	~~132.44~~	50.00
	SK 40	18	63	50	118	~~92.69~~	35.00	118	~~132.44~~	50.00
	SK 40	20	63	52	120	~~92.69~~	35.00	120	~~132.44~~	50.00
	SK 40	25	100	65	125 1)	~~92.69~~	35.00			
	SK 40	32	100	72	132 1)	~~105.96~~	40.00			
medium length	SK 40	6	100	25	506	~~99.31~~	38.00			
	SK 40	8	100	28	508	~~99.31~~	38.00			
	SK 40	10	100	35	510	~~99.31~~	38.00			
	SK 40	12	100	42	512	~~99.31~~	38.00			
	SK 40	14	100	44	514	~~99.31~~	38.00			
	SK 40	16	100	48	516	~~136.12~~	52.00			
	SK 40	18	100	50	518	~~99.31~~	38.00			
	SK 40	20	100	52	520	~~136.12~~	52.00			
extra-long	SK 40	6	160	25	606	~~105.96~~	40.00			
	SK 40	8	160	28	608	~~105.96~~	40.00			
	SK 40	10	160	35	610	~~105.96~~	40.00			
	SK 40	12	160	42	612	~~105.96~~	40.00			
	SK 40	14	160	44	614	~~105.96~~	40.00			
	SK 40	16	160	48	616	~~105.96~~	40.00			
	SK 40	18	160	50	618	~~105.96~~	40.00			
	SK 40	20	160	52	620	~~105.96~~	40.00			
	SK 40	25	160	65	625 1)	~~105.96~~	40.00			

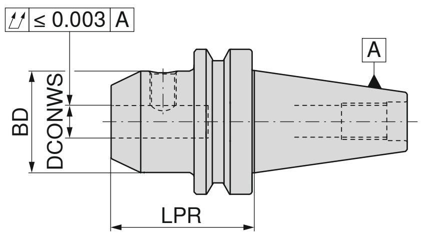
1) Version with two grubscrews

Spare parts can be found in → **Chapter 16 Adapters and accessoires in the clamping technology catalogue.**

Cylindrical shank adapter (Weldon) – BT-FC

- ▲ with face contact
- ▲ for shanks according to DIN 6535 / 1835 B with lateral clamping flat
- ▲ also available with Balluff chip **on request**

WNT \ Standard



AD
G 2,5 n$_{max}$ 25000

Version	Adapter	DCONWS $_{H4}$	LPR	BD	84 552 ...		PG Y8	
		mm	mm	mm			£	£
short	BT-FC 30	6	50	25	006		~~115.99~~	44.00
	BT-FC 30	8	50	28	008		~~115.99~~	44.00
	BT-FC 30	10	50	35	010		~~115.99~~	44.00
	BT-FC 30	12	50	42	012		~~115.99~~	44.00
	BT-FC 30	16	63	48	016		~~124.45~~	47.00
	BT-FC 30	20	63	52	020		~~124.45~~	47.00
	BT-FC 40	6	50	25	106		~~146.99~~	56.00
	BT-FC 40	8	50	28	108		~~142.22~~	54.00
	BT-FC 40	10	63	35	110		~~142.22~~	54.00
	BT-FC 40	12	63	42	112		~~142.22~~	54.00
	BT-FC 40	16	63	48	116		~~142.22~~	54.00
	BT-FC 40	20	63	52	120		~~142.22~~	54.00
	BT-FC 40	25	90	65	125	1)	~~189.08~~	72.00
	BT-FC 40	32	100	72	132	1)	~~189.08~~	72.00
	BT-FC 50	6	63	25	306		~~218.16~~	83.00
	BT-FC 50	8	63	28	308		~~211.72~~	81.00
	BT-FC 50	10	63	35	310		~~211.72~~	81.00
	BT-FC 50	12	80	42	312		~~211.72~~	81.00
	BT-FC 50	16	80	48	316		~~211.72~~	81.00
	BT-FC 50	20	80	52	320		~~211.72~~	81.00
	BT-FC 50	25	100	65	325	1)	~~242.36~~	92.00
	BT-FC 50	32	105	72	332	1)	~~242.36~~	92.00

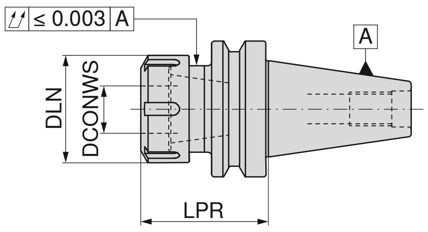
1) Version with two grubscrews

ER Collet chuck – BT-FC

- ▲ with face contact
- ▲ also available with Balluff chip **on request**

Scope of supply:
Toolholder including nut

WNT \ Standard



AD
G 2,5 n$_{max}$ 20000

Version	Adapter	DCONWS	LPR	DLN	TQX	for collet	84 557 ...		PG Y8	
		mm	mm	mm	Nm				£	£
short	BT-FC 30	1 - 10	63	28	56	426E (ER16)	010	1)	~~130.89~~	50.00
	BT-FC 30	1 - 16	60	42	104	430E (ER25)	016		~~130.89~~	50.00
	BT-FC 30	2 - 20	60	50	136	470E (ER32)	020		~~130.89~~	50.00
	BT-FC 40	1 - 10	63	28	56	426E (ER16)	110	1)	~~164.87~~	63.00
	BT-FC 40	1 - 16	60	42	104	430E (ER25)	116		~~164.87~~	63.00
	BT-FC 40	2 - 20	60	50	136	470E (ER32)	120		~~164.87~~	63.00
	BT-FC 50	1 - 16	70	42	104	430E (ER25)	316		~~224.60~~	86.00
	BT-FC 50	2 - 20	70	50	136	470E (ER32)	320		~~224.60~~	86.00
medium length	BT-FC 50	1 - 10	100	28	56	426E (ER16)	310	1)	~~224.60~~	86.00

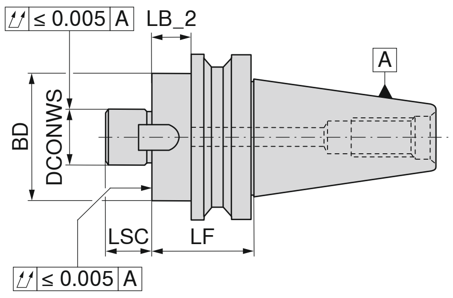
1) with 6 position lock nut

ⓘ Spare parts can be found in → **Chapter 16 Adapters and accessoires in the clamping technology catalogue.**

Shell mill adapter – BT-FC

- ▲ with face contact
- ▲ with fixed drive dogs and enlarged contact face for milling cutters with transverse slot
- ▲ also available with Balluff chip **on request**

WNT \ Standard



AD
G 6,3 n$_{max}$ 15000

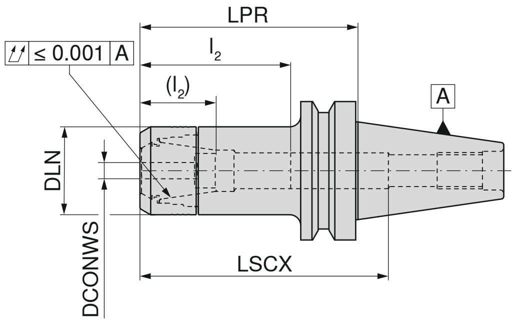
Version	Adapter	DCONWS	LB_2	LF	BD	LSC	84 562 ...	PG Y8	
		mm	mm	mm	mm	mm		£	£
short	BT-FC 30	16	18	39.0	40	17	016	~~127.67~~	49.00
	BT-FC 30	22	18	39.0	50	19	022	~~127.67~~	49.00
	BT-FC 30	27	18	39.0	60	21	027	~~127.67~~	49.00
	BT-FC 30	32	28	49.0	80	24	032	~~127.67~~	49.00
	BT-FC 40	16	8	34.0	40	17	116	~~153.54~~	58.00
	BT-FC 40	22	8	34.0	50	19	122	~~153.54~~	58.00
	BT-FC 40	27	8	34.0	60	21	127	~~153.54~~	58.00
	BT-FC 40	32	23	49.0	80	24	132	~~153.54~~	58.00
	BT-FC 40	40	23	49.0	89	27	140	~~153.54~~	58.00
	BT-FC 50	22	12	48.5	50	19	322	~~177.74~~	68.00
	BT-FC 50	27	12	48.5	60	21	327	~~177.74~~	68.00
	BT-FC 50	32	12	48.5	80	24	332	~~189.08~~	72.00
	BT-FC 50	40	17	53.5	89	27	340	~~189.08~~	72.00

ER Precision Collet chuck – Centro-P – BT-FC

- ▲ with face contact
- ▲ for standard or sealed nuts
- ▲ maximum clamping range covered according to ISO tolerance field H10
- ▲ for clamping a roll key is required
- ▲ p$_{max}$ = 80 bar
- ▲ also available with Balluff chip **on request**

Scope of supply:
Holder **without** nut, **without** backstop

Centro-P **WNT** \ Performance



AD
G 2,5 n$_{max}$ 25000

Adapter	DCONWS	LPR	BD	LSCX	l$_2$ (l$_2$)	for collet	84 525 ...	PG Y8	
	mm	mm	mm	mm	mm			£	£
BT-FC 30	1 - 10	75	30	97	28 - 45 (14 - 31)	426E (ER16)	002	~~267.04~~	102.00
BT-FC 30	2 - 16	75	40	72	38 - 56 (23 - 39)	430E (ER25)	012	~~270.85~~	103.00
BT-FC 30	2 - 20	75	45	84	42 - 62 (24 - 45)	470E (ER32)	022	~~270.85~~	103.00
BT-FC 40	1 - 10	75	30	90	38 - 53 (29 - 39)	426E (ER16)	102	~~297.55~~	113.00
BT-FC 40	2 - 16	75	40	100	42 - 59 (36 - 41)	430E (ER25)	112	~~301.37~~	115.00
BT-FC 40	2 - 20	75	50	100	42 - 76 (42 - 52)	470E (ER32)	122	~~301.37~~	115.00

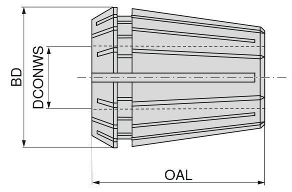
ⓘ LSCX = clamping depth without back stop screw for shanks
l$_2$ = with back stop screw 1, dimension in brackets ( ) = with back stop screw 2
dimension LPR when using tightening nuts with seals 4 mm longer

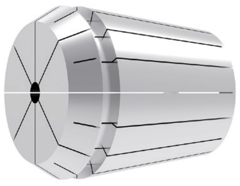
ER precision collet

- ▲ DIN ISO 15488-B (old DIN 6499-B)
- ▲ Double taper collet
- ▲ 16 times slotted

ER-B
20 µm

WNT \ Standard





DCONWS mm	BD = 17 OAL = 27.5 426 E / ER16 **82 687 ...** PG Y8	£	£	BD = 21 OAL = 31.5 428 E / ER20 **82 688 ...** PG Y8	£	£	BD = 26 OAL = 34 430 E / ER25 **82 689 ...** PG Y8	£	£	BD = 33 OAL = 40 470 E / ER32 **82 690 ...** PG Y8	£	£	BD = 41 OAL = 46 472 E / ER40 **82 691 ...** PG Y8	£	£
1	**01000**	~~24.14~~	11.00	**01000**	~~24.95~~	10.00									
2	**02000**	~~24.14~~	11.00	**02000**	~~24.95~~	10.00	**02000**	~~25.91~~	11.00						
3	**03000**	~~19.62~~	9.00	**03000**	~~18.14~~	7.00	**03000**	~~19.44~~	7.00	**03000**	~~20.92~~	8.00	**03000**	~~26.42~~	10.00
4	**04000**	~~19.62~~	9.00	**04000**	~~18.14~~	7.00	**04000**	~~19.44~~	7.00	**04000**	~~20.92~~	8.00	**04000**	~~26.42~~	10.00
5	**05000**	~~19.62~~	9.00	**05000**	~~18.14~~	7.00	**05000**	~~19.44~~	7.00	**05000**	~~20.92~~	8.00	**05000**	~~26.42~~	10.00
6	**06000**	~~19.62~~	9.00	**06000**	~~18.14~~	7.00	**06000**	~~19.44~~	7.00	**06000**	~~20.92~~	8.00	**06000**	~~26.42~~	10.00
7	**07000**	~~19.62~~	9.00	**07000**	~~18.14~~	7.00	**07000**	~~19.44~~	7.00	**07000**	~~20.92~~	8.00	**07000**	~~26.42~~	10.00
8	**08000**	~~19.62~~	9.00	**08000**	~~18.14~~	7.00	**08000**	~~19.44~~	7.00	**08000**	~~20.92~~	8.00	**08000**	~~26.42~~	10.00
9	**09000**	~~19.62~~	9.00	**09000**	~~18.14~~	7.00	**09000**	~~19.44~~	7.00	**09000**	~~20.92~~	8.00	**09000**	~~26.42~~	10.00
10	**10000**	~~19.62~~	9.00	**10000**	~~18.14~~	7.00	**10000**	~~19.44~~	7.00	**10000**	~~20.92~~	8.00	**10000**	~~26.42~~	10.00
11				**11000**	~~18.14~~	7.00	**11000**	~~19.44~~	7.00	**11000**	~~20.92~~	8.00	**11000**	~~26.42~~	10.00
12				**12000**	~~18.14~~	7.00	**12000**	~~19.44~~	7.00	**12000**	~~20.92~~	8.00	**12000**	~~26.42~~	10.00
13				**13000**	~~18.14~~	7.00	**13000**	~~19.44~~	7.00	**13000**	~~20.92~~	8.00	**13000**	~~26.42~~	10.00
14							**14000**	~~19.44~~	7.00	**14000**	~~20.92~~	8.00	**14000**	~~26.42~~	10.00
15							**15000**	~~19.44~~	7.00	**15000**	~~20.92~~	8.00	**15000**	~~26.42~~	10.00
16							**16000**	~~19.44~~	7.00	**16000**	~~20.92~~	8.00	**16000**	~~26.42~~	10.00
17										**17000**	~~20.92~~	8.00	**17000**	~~26.42~~	10.00
18										**18000**	~~20.92~~	8.00	**18000**	~~26.42~~	10.00
19										**19000**	~~20.92~~	8.00	**19000**	~~26.42~~	10.00
20										**20000**	~~20.92~~	8.00	**20000**	~~26.42~~	10.00
21													**21000**	~~26.42~~	10.00
22													**22000**	~~26.42~~	10.00
23													**23000**	~~26.42~~	10.00
24													**24000**	~~26.42~~	10.00
25													**25000**	~~26.42~~	10.00
26													**26000**	~~26.42~~	10.00

Collet Set

Scope of supply

82 687 01000 DCONWS 1,0
82 687 02000 DCONWS 2,0
82 687 03000 DCONWS 3,0
82 687 04000 DCONWS 4,0
82 687 05000 DCONWS 5,0
82 687 06000 DCONWS 6,0
82 687 07000 DCONWS 7,0
82 687 08000 DCONWS 8,0
82 687 09000 DCONWS 9,0
82 687 10000 DCONWS 10,0

Set	BD mm	OAL mm	**82 687 ...** PG Y8	£	£
426 E / ER16	17	27.5	**99900**	~~217.31~~	141.00

Collet Set

Scope of supply

82 688 01000 DCONWS 1,0
82 688 02000 DCONWS 2,0
82 688 03000 DCONWS 3,0
82 688 04000 DCONWS 4,0
82 688 05000 DCONWS 5,0
82 688 06000 DCONWS 6,0
82 688 07000 DCONWS 7,0
82 688 08000 DCONWS 8,0
82 688 09000 DCONWS 9,0
82 688 10000 DCONWS 10,0
82 688 11000 DCONWS 11,0
82 688 12000 DCONWS 12,0
82 688 13000 DCONWS 13,0

Set	BD mm	OAL mm	**82 688 ...** PG Y8	£	£
428 E / ER20	21	31.5	**99900**	~~233.36~~	141.00

Collet Set

Scope of supply

82 689 02000 DCONWS 2,0
82 689 03000 DCONWS 3,0
82 689 04000 DCONWS 4,0
82 689 05000 DCONWS 5,0
82 689 06000 DCONWS 6,0
82 689 07000 DCONWS 7,0
82 689 08000 DCONWS 8,0
82 689 09000 DCONWS 9,0
82 689 10000 DCONWS 10,0
82 689 11000 DCONWS 11,0
82 689 12000 DCONWS 12,0
82 689 13000 DCONWS 13,0
82 689 14000 DCONWS 14,0
82 689 15000 DCONWS 15,0
82 689 16000 DCONWS 16,0

Set	BD mm	OAL mm	**82 689 ...** PG Y8	£	£
430 E / ER25	26	34	**99900**	~~306.46~~	141.00

Collet Set

Scope of supply

82 690 03000 DCONWS 3,0
82 690 04000 DCONWS 4,0
82 690 05000 DCONWS 5,0
82 690 06000 DCONWS 6,0
82 690 07000 DCONWS 7,0
82 690 08000 DCONWS 8,0
82 690 09000 DCONWS 9,0
82 690 10000 DCONWS 10,0
82 690 11000 DCONWS 11,0
82 690 12000 DCONWS 12,0
82 690 13000 DCONWS 13,0
82 690 14000 DCONWS 14,0
82 690 15000 DCONWS 15,0
82 690 16000 DCONWS 16,0
82 690 17000 DCONWS 17,0
82 690 18000 DCONWS 18,0
82 690 19000 DCONWS 19,0
82 690 20000 DCONWS 20,0

Set	BD mm	OAL mm	**82 690 ...** PG Y8	£	£
470 E / ER32	33	40	**99900**	~~376.09~~	150.00

Collet Set

Scope of supply

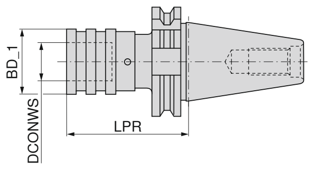
82 691 03000 DCONWS 3,0
82 691 04000 DCONWS 4,0
82 691 05000 DCONWS 5,0
82 691 06000 DCONWS 6,0
82 691 07000 DCONWS 7,0
82 691 08000 DCONWS 8,0
82 691 09000 DCONWS 9,0
82 691 10000 DCONWS 10,0
82 691 11000 DCONWS 11,0
82 691 12000 DCONWS 12,0
82 691 13000 DCONWS 13,0
82 691 14000 DCONWS 14,0
82 691 15000 DCONWS 15,0
82 691 16000 DCONWS 16,0
82 691 17000 DCONWS 17,0
82 691 18000 DCONWS 18,0
82 691 19000 DCONWS 19,0
82 691 20000 DCONWS 20,0
82 691 21000 DCONWS 21,0
82 691 22000 DCONWS 22,0
82 691 23000 DCONWS 23,0
82 691 24000 DCONWS 24,0
82 691 25000 DCONWS 25,0
82 691 26000 DCONWS 26,0

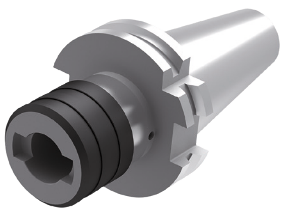
Set	BD mm	OAL mm	**82 691 ...** PG Y8	£	£
472 E / ER40	41	46	**99900**	~~635.42~~	240.00

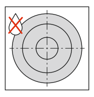
Quick change tap chuck with length compensation

- ▲ With length compensation under tension and compression (LZD)
- ▲ also available with Balluff chip **on request**

WNT \ Standard





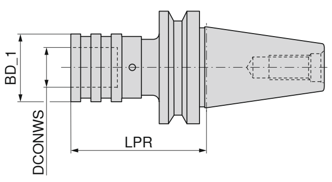


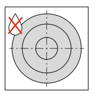
Adapter	cutting range	SZID	LPR mm	BD_1 mm	DCONWS mm	LZD± mm	**83 428 ...** PG Y8	£	£
SK 30	M6 - M20	02	101	55	31	15	**320**	~~577.70~~	220.00
SK 30	M3 - M12	01	60	38	19	9	**312**	~~508.49~~	194.00
SK 40	M6 - M20	02	100	55	31	15	**420**	~~425.54~~	162.00
SK 40	M3 - M12	01	60	38	19	9	**412**	~~392.71~~	150.00
SK 50	M6 - M20	02	83	55	31	15	**520**	~~635.32~~	242.00
SK 50	M3 - M12	01	62	38	19	9	**512**	~~586.51~~	223.00

Quick change tap chuck with length compensation

- ▲ With length compensation under tension and compression (LZD)
- ▲ also available with Balluff chip **on request**

WNT \ Standard



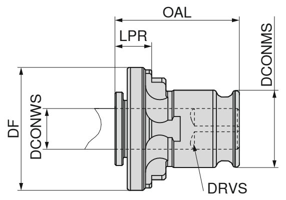


Adapter	cutting range	SZID	LPR mm	BD_1 mm	DCONWS mm	LZD± mm	**83 528 ...** PG Y8	£	£
BT 30	M3 - M12	01	63	38	19	9	**312**	~~511.20~~	195.00
BT 30	M6 - M20	02	96	55	31	15	**320**	~~641.09~~	244.00
BT 40	M3 - M12	01	68	38	19	9	**412**	~~410.17~~	156.00
BT 40	M6 - M20	02	93	55	31	15	**420**	~~425.54~~	162.00
BT 50	M3 - M12	01	80	38	19	9	**512**	~~687.37~~	262.00
BT 50	M6 - M20	02	102	55	31	15	**520**	~~791.32~~	301.00

Quick change tap adapter

- ▲ Normal version without overload clutch
- ▲ For mounting taps
- ▲ For right-hand and left-hand threads

WNT \ Standard



AD

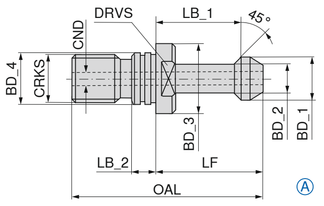
SZID	DCONWS mm	DRVS mm	DIN 371	DIN 374 / 376	DF mm	DCONMS mm	OAL mm	LPR mm	83 610 ...	PG Y8 £	£
01	11.0	9.0		M14	30	19	28.5	7	**110**	~~42.29~~	16.00
01	3.5	2.7	M3		30	19	28.5	7	**100**	~~42.29~~	16.00
01	4.5	3.4	M4		30	19	28.5	7	**101**	~~42.29~~	16.00
01	4.0	3.0	M3,5		30	19	28.5	7	**102**	~~42.29~~	16.00
01	2.8	2.1	M2 - M2,6		30	19	28.5	7	**103**	~~42.29~~	16.00
01	5.5	4.3		M7	30	19	28.5	7	**104**	~~42.29~~	16.00
01	6.0	4.9	M4,5 - M6	M8	30	19	28.5	7	**105**	~~42.29~~	16.00
01	7.0	5.5	M7	M10	30	19	28.5	7	**106**	~~42.29~~	16.00
01	8.0	6.2	M8	M11	30	19	28.5	7	**107**	~~42.29~~	16.00
01	9.0	7.0	M9	M12	30	19	28.5	7	**108**	~~42.29~~	16.00
01	10.0	8.0	M10		30	19	28.5	7	**109**	~~42.29~~	16.00
02	11.0	9.0		M14	46	31	46.0	11	**205**	~~58.16~~	22.00
02	6.0	4.9	M4,5 - M6		46	31	46.0	11	**200**	~~58.16~~	22.00
02	7.0	5.5	M7		46	31	46.0	11	**201**	~~58.16~~	22.00
02	8.0	6.2	M8		46	31	46.0	11	**202**	~~58.16~~	22.00
02	9.0	7.0	M9		46	31	46.0	11	**203**	~~58.16~~	22.00
02	10.0	8.0	M10		46	31	46.0	11	**204**	~~58.16~~	22.00
02	12.0	9.0		M16	46	31	46.0	11	**206**	~~58.16~~	22.00
02	14.0	11.0		M18	46	31	46.0	11	**207**	~~58.16~~	22.00
02	16.0	12.0		M20	46	31	46.0	11	**208**	~~58.16~~	22.00
02	18.0	14.5		M22 - M24	46	31	46.0	11	**209**	~~58.16~~	22.00

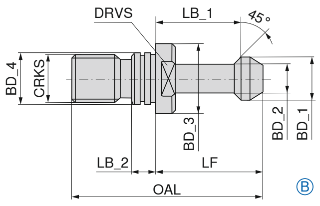
Pull stud for tool holders according to ISO 7388-2

- ▲ MAS-BT 45° Form A and B

Scope of supply:
including O-Ring

WNT \ Standard





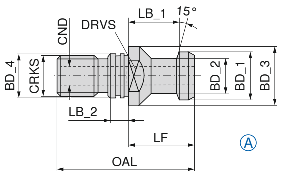
Adapter	BD_1 mm	BD_2 mm	BD_3 mm	BD_4 mm	CRKS	OAL mm	LF mm	LB_1 mm	LB_2 mm	CND mm	DRVS mm	TQX Nm	82 530 ...	PG Y8 £	£	82 534 ...	PG Y8 £	£
BT 30	11	7	16.5	12.5	M12	43	23	18	4.0		13	60	**030**	~~19.09~~	7.00			
BT 30	11	7	16.5	12.5	M12	43	23	18	4.0	2.2	13	60				**030**	~~19.09~~	7.00
BT 40	15	10	23.0	17.0	M16	60	35	28	5.5		19	90	**040**	~~16.35~~	6.00			
BT 40	15	10	23.0	17.0	M16	60	35	28	5.5	4.0	19	90				**040**	~~19.09~~	7.00
BT 50	23	17	38.0	25.0	M24	85	45	35	8.0		30	145	**050**	~~23.19~~	9.00			
BT 50	23	17	38.0	25.0	M24	85	45	35	8.0	6.0	30	145				**050**	~~24.56~~	9.00

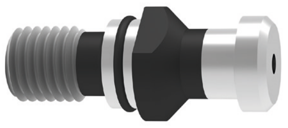
Pull studs for tool holders according to ISO 7388-1

- ▲ ISO 7388-3 AD
- ▲ For tools with or without axial coolant supply

Scope of supply:
including O-Ring

WNT \ Standard





Adapter	BD_1 mm	BD_2 mm	BD_3 mm	BD_4 mm	CRKS	OAL mm	LF mm	LB_1 mm	LB_2 mm	CND mm	DRVS mm	TQX Nm	82 468 ...	PG Y8 £	£
SK 30	13	9	17	13	M12	44	24	19	5	3.5	14	60	**030**	~~15.56~~	6.00
SK 40	19	14	23	17	M16	54	26	20	7	7.0	19	90	**040**	~~13.24~~	5.00
SK 50	28	21	36	25	M24	74	34	25	10	11.5	30	145	**050**	~~19.66~~	7.00

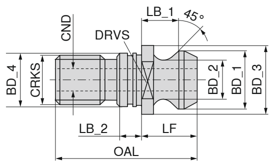
Pull studs for tool holders according to ISO 7388-1

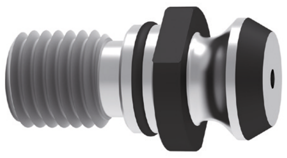
- ▲ CAT Mazak
- ▲ Face ground flat

Scope of supply:

SK 50 including O-ring
SK 40 without O-ring groove

WNT \ Standard



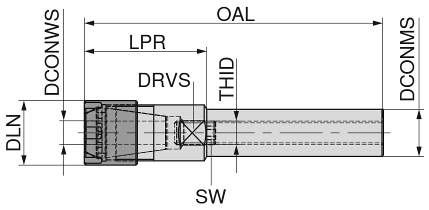


Adapter	BD_1	BD_2	BD_3	BD_4	CRKS	OAL	LF	LB_1	LB_2	CND	DRVS	TQX	82 487 ...		PG Y8
	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	Nm		£	£
SK 40	18.79	12.44	21.8	17	M16	41.26	16.25	11.17	4.0	7.0	19	90	**040**	~~13.24~~	5.00
SK 50	29.10	19.60	37.0	25	M24	65.50	25.55	17.95	5.5	11.5	30	145	**050**	~~20.77~~	8.00

ER collet chuck with mini clamping nut

▲ with cylindrical shank

WNT \ Standard



AD

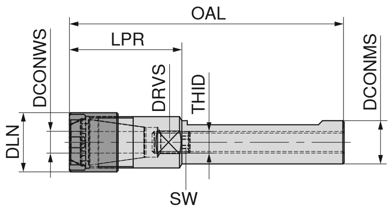
DCONMS h6	DCONWS	OAL	LPR	DLN	THID	DRVS	for collet	83 453 ...		PG Y8
mm	mm	mm	mm	mm		mm			£	£
8	1 - 5	81	26	12		9	4004E (ER08)	**081** 1)	~~136.23~~	52.00
12	1 - 5	157	20	12	M5x0,8	10	4004E (ER08)	**122**	~~288.14~~	110.00
16	1 - 7	185	25	16	M7,5x0,5	14	4008E (ER11)	**163**	~~283.09~~	108.00
16	1 - 10	117	37	22	M11x1	17	426E (ER16)	**164**	~~288.14~~	110.00
16	1 - 10	199	39	22	M8x1,25	17	426E (ER16)	**165**	~~283.09~~	108.00
20	1 - 10	168	28	22	M11x1	17	426E (ER16)	**204**	~~203.04~~	77.00
25	1 - 13	168	28	28	M14x1	22	428E (ER20)	**254**	~~234.90~~	89.00
25	1 - 16	189	39	35	M18x1	27	430E (ER25)	**256**	~~295.91~~	113.00

1) without coolant supply (form A)

ER collet chuck with mini clamping nut

▲ with cylindrical shank and clamping flat

WNT \ Standard



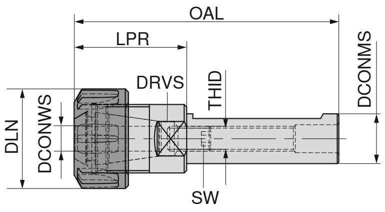
AD

DCONMS h6	DCONWS	OAL	LPR	DLN	THID	DRVS	for collet	83 454 ...		PG Y8
mm	mm	mm	mm	mm		mm			£	£
20	1 - 10	168	28	22	M11x1	17	426E (ER16)	**204**	~~203.04~~	77.00
20	1 - 13	138	38	28	M11x1	22	428E (ER20)	**206**	~~145.98~~	56.00
20	1 - 16	146	46	35	M14x1	27	430E (ER25)	**208**	~~170.22~~	65.00
25	1 - 13	168	28	28	M14x1	22	428E (ER20)	**254**	~~234.90~~	89.00
25	1 - 16	189	39	35	M18x1	27	430E (ER25)	**256**	~~295.91~~	113.00

ER Collet Chuck

▲ with cylindrical shank and clamping flat

WNT \ Standard



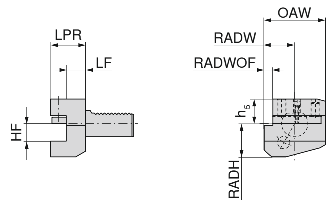
AD

DCONMS h6	DCONWS	OAL	LPR	DLN	THID	DRVS	for collet	83 455 ...		PG Y8
mm	mm	mm	mm	mm		mm			£	£
40	2 - 20	100	35	50	M22x1,5	36	470E (ER32)	**401**	~~172.96~~	66.00
40	2 - 20	160	35	50	M22x1,5	36	470E (ER32)	**402**	~~213.56~~	81.00
40	3 - 30	139	59	63	M28x1,5	40	472E (ER40)	**405**	~~198.28~~	76.00

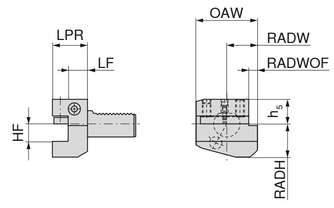
Note: Spanner to be ordered separately.

Radial tool holders, short

WNT \ Performance



B2



B1

B2

Left-hand

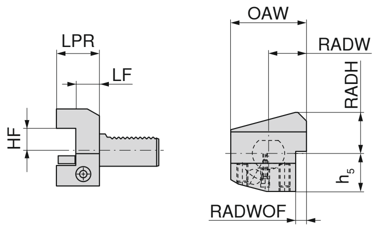
B1

Right-hand

DCONMS $_{h6}$	HF $_{0/-0,1}$	OAW	RADW	RADWOF	h_5	RADH	LF $_{0/+0,5}$	LPR	**82 189 ...** PG Y8			**82 185 ...** PG Y8		
mm	mm	mm	mm	mm	mm	mm	mm	mm		£	£		£	£
16	12	42	23.0	5.0	20.0	22	13.0	24				**160**	~~194.74~~	74.00
20	16	55	30.0	7.0	25.0	30	16.0	30	**200**	~~166.25~~	63.00	**200**	~~177.47~~	68.00
20	16	55	30.0	7.0	25.0	30	26.0	40	**201**	~~216.70~~	83.00	**201**	~~204.77~~	78.00
30	20	70	35.0	10.0	28.0	38	18.5	40	**300**	~~180.02~~	69.00	**300**	~~163.21~~	62.00
30	20	70	35.0	10.0	28.0	38	42.0	60	**301**	~~284.64~~	108.00	**301**	~~270.12~~	103.00
40	25	85	42.5	12.5	32.5	48	18.5	44	**400**	~~182.42~~	69.00	**400**	~~166.55~~	63.00
50	32	100	50.0	16.0	35.0	60	30.0	55	**500**	~~282.84~~	108.00	**500**	~~278.20~~	106.00

Radial tool holders, overhead, short

WNT \ Performance



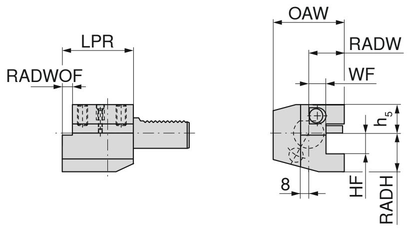
B3

Right-hand

DCONMS $_{h6}$	HF $_{0/-0,1}$	OAW	RADW	RADWOF	h_5	RADH	LF $_{0/+0,5}$	LPR	**82 193 ...** PG Y8		
mm	mm	mm	mm	mm	mm	mm	mm	mm		£	£
16	12	42	23.0	5.0	20.0	22	13.0	24	**160**	~~205.29~~	78.00
20	16	55	30.0	7.0	25.0	30	26.0	40	**201**	~~257.64~~	98.00
30	20	70	35.0	10.0	35.0	38	18.5	40	**300**	~~168.17~~	64.00
40	25	85	42.5	12.5	42.5	48	18.5	44	**400**	~~177.85~~	68.00
50	32	100	50.0	16.0	50.0	60	30.0	55	**500**	~~282.84~~	108.00

Axial tool holders

WNT \ Performance



C1

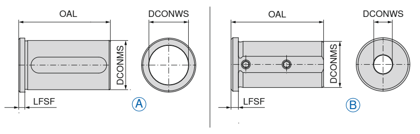
Right-hand

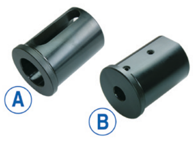
DCONMS $_{h6}$	HF $_{0/-0,1}$	OAW	RADW	WF $_{0/+0,3}$	h_5	RADH	LPR	RADWOF	**82 211 ...** PG Y8		
mm	mm	mm	mm	mm	mm	mm	mm	mm		£	£
30	20	70	35.0	17.0	28.0	38	70	10.0	**300**	~~189.32~~	72.00
40	25	85	42.5	20.5	32.5	48	85	12.5	**400**	~~220.23~~	84.00
50	32	100	50.0	25.5	35.0	60	100	16.0	**500**	~~321.11~~	122.00

Reduction sleeves for direct clamping

▲ For tools with cylindrical shank

WNT \ Performance

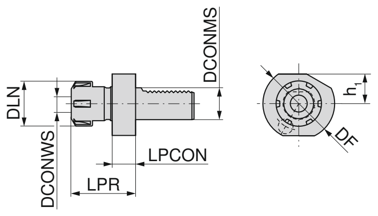




DCONMS	DCONWS	OAL	LFSF	Fig.	**83 272 ...** PG Y8		
mm	mm	mm	mm			£	£
25	12	50	4	B	**262**	~~110.78~~	42.00
25	6	50	4	B	**256**	~~145.28~~	55.00
25	8	50	4	B	**258**	~~110.78~~	42.00
25	10	50	4	B	**260**	~~110.78~~	42.00
25	16	50	4	A	**266**	~~110.78~~	42.00
25	20	50	4	A	**270**	~~110.78~~	42.00
32	6	58	5	B	**326**	~~149.91~~	57.00
32	8	58	5	B	**328**	~~149.91~~	57.00
32	10	58	5	B	**330**	~~113.91~~	43.00
32	12	58	5	B	**332**	~~113.91~~	43.00
32	16	58	5	A	**336**	~~113.91~~	43.00
32	20	58	5	A	**340**	~~113.91~~	43.00
32	25	58	5	A	**345**	~~113.91~~	43.00
40	8	58	5	B	**408**	~~182.12~~	69.00
40	10	58	5	B	**410**	~~149.91~~	57.00
40	12	58	5	B	**412**	~~149.91~~	57.00
40	16	58	5	A	**416**	~~149.91~~	57.00
40	20	58	5	A	**420**	~~149.91~~	57.00
40	25	58	5	A	**425**	~~149.91~~	57.00
40	32	58	5	A	**432**	~~149.91~~	57.00
50	25	75	5	A	**525**	~~169.12~~	64.00
50	12	75	5	B	**512**	~~169.12~~	64.00
50	16	75	5	A	**516**	~~169.12~~	64.00
50	20	75	5	A	**520**	~~169.12~~	64.00
50	32	75	5	A	**532**	~~169.12~~	64.00
50	40	75	5	A	**540**	~~169.12~~	64.00

ER Collet chucks

WNT \ Performance



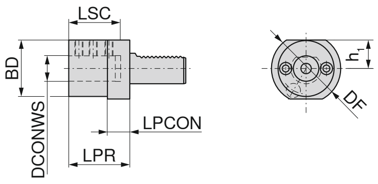
E4

DCONMS $_{h6}$	DCONWS	DF	DLN	h_1	LPR	LPCON	for collet	**82 286 ...** PG Y8		
mm	mm	mm	mm	mm	mm	mm			£	£
16	1 - 10	40	28	18.0	45.5	14	426E (ER16)	**160**	~~280.77~~	107.00
16	1 - 13	40	34	18.0	44.0	14	428E (ER20)	**161**	~~277.84~~	106.00
20	1 - 16	50	42	23.0	57.0	18	430E (ER25)	**202**	~~228.71~~	87.00
20	2 - 20	50	50	23.0	62.0	18	470E (ER32)	**203**	~~239.12~~	91.00
30	1 - 16	68	42	28.0	57.0	22	430E (ER25)	**300**	~~225.76~~	86.00
30	2 - 20	68	50	28.0	75.0	22	470E (ER32)	**301**	~~225.97~~	86.00
40	1 - 16	83	42	32.5	63.0	22	430E (ER25)	**400**	~~244.79~~	93.00
40	2 - 20	83	50	32.5	75.0	22	470E (ER32)	**401**	~~244.79~~	93.00
40	3 - 26	83	63	32.5	75.0	22	472E (ER40)	**402**	~~240.40~~	92.00
50	2 - 20	94	50	35.0	75.0	30	470E (ER32)	**500**	~~356.52~~	136.00
50	3 - 26	94	63	35.0	63.0	30	472E (ER40)	**501**	~~356.52~~	136.00

Boring bar holder

▲ for turning tools with cylindrical shank
▲ Coolant supply either through the tool or via the ball-shaped spray nozzle

WNT \ Performance



E2

DCONMS $_{h6}$	DCONWS $_{H7}$	DF	BD	h_1	LPR	LPCON	LSC	**82 268 ...** PG Y8		
mm	mm	mm	mm	mm	mm	mm	mm		£	£
16	6	40	32	18.0	44	13	34	**160** 1)	~~240.85~~	92.00
16	8	40	32	18.0	44	13	34	**161** 1)	~~183.80~~	70.00
16	10	40	32	18.0	44	13	34	**162** 1)	~~183.80~~	70.00
16	12	40	40	18.0	44	13	34	**163** 1)	~~183.80~~	70.00
16	16	40	40	18.0	44	13	34	**164** 1)	~~183.80~~	70.00
20	8	50	40	23.0	50	18	41	**200**	~~170.89~~	65.00
20	10	50	40	23.0	50	18	41	**201**	~~170.89~~	65.00
20	12	50	40	23.0	50	18	41	**202**	~~170.89~~	65.00
20	16	50	40	23.0	50	18	41	**203**	~~170.89~~	65.00
20	20	50	50	23.0	50	18	41	**204**	~~170.89~~	65.00
20	25	50	50	23.0	60	18	51	**205**	~~170.89~~	65.00
30	8	68	55	28.0	60	22	51	**300**	~~166.55~~	63.00
30	10	68	55	28.0	60	22	51	**301**	~~166.55~~	63.00
30	12	68	55	28.0	60	22	51	**302**	~~166.55~~	63.00
30	16	68	55	28.0	60	22	51	**303**	~~166.55~~	63.00
30	20	68	55	28.0	60	22	51	**304**	~~166.55~~	63.00
30	25	68	55	28.0	60	22	51	**305**	~~166.55~~	63.00
30	32	68	68	28.0	75	22	61	**306**	~~166.55~~	63.00
40	8	83	55	32.5	75	22	61	**400**	~~169.79~~	65.00
40	10	83	55	32.5	75	22	61	**401**	~~169.79~~	65.00
40	12	83	55	32.5	75	22	61	**402**	~~169.79~~	65.00
40	16	83	55	32.5	75	22	61	**403**	~~169.79~~	65.00
40	20	83	55	32.5	75	22	61	**404**	~~169.79~~	65.00
40	25	83	55	32.5	75	22	61	**405**	~~169.79~~	65.00
40	32	83	83	32.5	75	22	61	**406**	~~169.79~~	65.00
40	40	83	83	32.5	90	22	76	**407**	~~169.79~~	65.00
50	12	98	68	35.0	90	30	76	**500**	~~244.57~~	93.00
50	16	98	68	35.0	90	30	76	**501**	~~244.57~~	93.00
50	20	98	68	35.0	90	30	76	**502**	~~244.57~~	93.00
50	25	98	68	35.0	90	30	76	**503**	~~234.48~~	89.00
50	32	98	68	35.0	90	30	76	**504**	~~234.48~~	89.00
50	40	98	98	35.0	90	30	76	**505**	~~234.48~~	89.00
50	50	98	98	35.0	100	30	86	**506**	~~234.48~~	89.00

1) Coolant supply through pipe joint

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