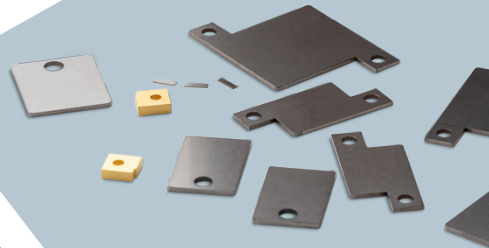
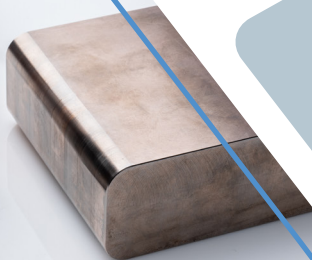


STRONG MATERIALS

for Thermal Management Solutions



Properties

	WCu10	WCu15	WCu20	Mo	W	Cu
Cu-content [wt.%]	10 ± 2%	15 ± 2%	20 ± 2%	0%	0%	100%
Density [g/cm3]	17,1	16,4	15,5	10,2	18,2	8,9
CTE (RT–400°C) 10 ⁻⁶ /K	6.6 -7.0	8.0 - 8.2	9.2 - 9.5	5,2	4,4	18
CTE (RT–800°C) 10 ⁻⁶ /K	6.1 - 6.4	7.6 - 7.8	9.5 - 9.7	5,8	4,7	20
Thermal conductivity at 20°C W/mK	194 - 210	218 - 220	236 - 238	142	174	394
Thermal conductivity at 100°C W/mK	187 - 199	215 - 218	230 - 234	117	154	480
Hardness HV10	288 - 309	255 - 258	221 - 244	231	460	105

The combination of thermal conductivity and CTE makes the WCu-Material very suitable for SiC and GaN applications ($4.0 \times 10^{-6}/K$ / $5.8 \times 10^{-6}/K$).

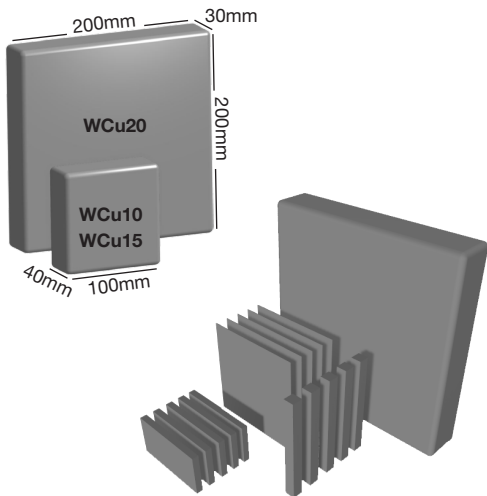
Available products

Prematerial:

- WCu10 & WCu15
Block size: 100x100x40
- WCu20
Block size: 100x100x40
or maximum Size: 200x200x30-40
- Individual sizes upon request

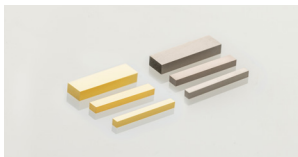
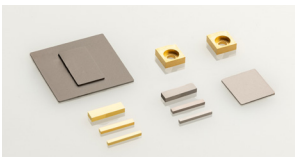
Semi-finished material:

- Sliced or pre machined blocks & parts



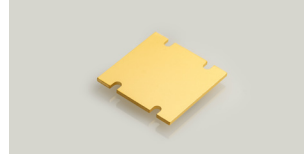
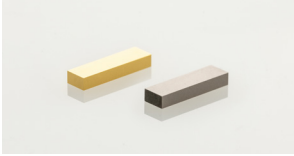
Finished products

According to customer drawing



Plating solutions

- Ni
- NiAu
- NiAg
- NiCo
- Other coatings upon request



Plansee supply chain

- Vertical integration from ore to clean room assembly
- Secures raw material supply
- 100% conflict free sourcing



Controlled raw material supply



100 years experience in powder metallurgy



Fabrication of components in Europe, USA and Asia



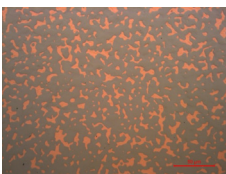
Clean room assembly in Austria and Japan

Typical applications

- Heatsinks, heatspreaders, baseplates
- Laserdiodes, radiofrequency, opto-communication
- Matching CTE material for SiC & GaN materials (chips)

Advantages

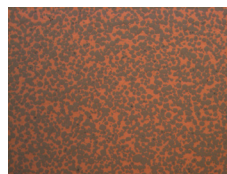
- In house supply chain (from powder processing to the finished product)
- Machining know-how
- Homogenous material distribution leads to best in class material properties



PSH WCu10 TM



PSH WCu15 TM



PSH WCu20 TM

500X

Contact persons



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