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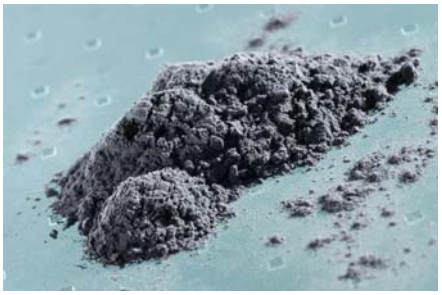
TREIBACHER INDUSTRIE AG
Innovation is our tradition.

Tungsten Carbide *WC*

Application

Three WC grades are available (FD, SD and HT):
The grade WC FD is deagglomerated by a classifier mill. This grade is used for fabricating the most demanding hard metal parts like end mills, drills, routers, PCB-drills etc.
The grade WC SD is deagglomerated by dry ball mill. The grade is widely used for cutting tools, mould and dies and other wear parts.
The grade WC HT is carburised with a temperature exceeding 2000°C. This grade is used for manufacturing hard metal bits for mining and construction.
The pressing properties can be adjusted on customer's demand.



Chemical Characteristics

Elements	%	Elements	%
Al	0.001 max	Fe	0.015 max
C free[1]	0.05 max	K	0.0015 max
C total	6.10 – 6.16	Mo	0.010 max
Ca	0.002 max	Na	0.0015 max
Cr	0.002 max	Ni	0.001 max
Cu	0.001 max	Si	0.002 max

Oxygen level depending on grain size

FSSS	O
µm	%
– 0.6	0.35 max
0.6 – 0.8	0.30 max
0.8 – 1.0	0.25 max
1.0 – 2.0	0.15 max
2.0 – 5.0	0.10 max
5.0 – 8.0	0.05 max

Typical Pre-Doping Combinations

Cr_3C_2	-	-	0.5	0.6	1.0
VC	0.1	0.2	0.2	0.3	-

The doping can be adjusted on customer's demand.

Physical Characteristics

Grade	FSSS	Grade	FSSS
	µm		µm
WC 05	0.50 – 0.55	WC 30	2.80 – 3.20
WC 06	0.56 – 0.65	WC 35	3.30 – 3.70
WC 07	0.66 – 0.75	WC 40	3.80 – 4.2
WC 08	0.76 – 0.85	WC 45	4.2 – 4.8
WC 10	0.96 – 1.10	WC 50	4.5 – 5.5
WC 12	1.11 – 1.30	WC 60	5.5 – 6.5
WC 15	1.41 – 1.60	WC HT 70	6.5 – 7.5
WC 18	1.61 – 1.80	WC HT 80	7.5 – 8.5
WC 20	1.81 – 2.20	WC HT 100	9 – 11
WC 25	2.30 – 2.70	WC HT 120	11 – 13

[1] *C free not precise for Cr_3C_2 doped material*

Packing

- 50 kg in 25 l coated steel drums with rubber sealing.
- Material in PE- Bag

Maximum Lot Size

- HT: 3.000 kg
- 0.5 – 0.8 µm: 4.000 kg
- 1.0 – 6.0 µm: 5.000 kg

Inspection certificate according DIN EN 10204 3.1