

Cemented carbide grade: B45

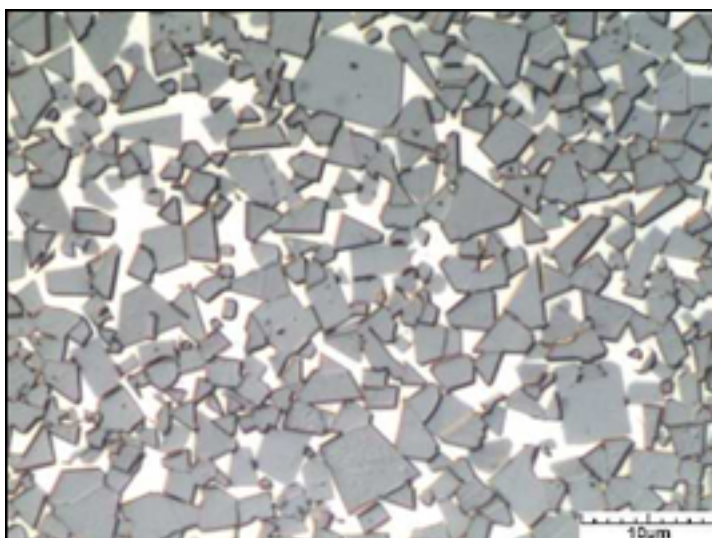
Physical properties:

Density:	14,00 ± 0,1	g/cm ³
Hardness:	1030 ± 30	HV30
Transverse rupture strength:	435,12	10 ³ psi
Compression strength:	3950	MPa
Modulus of elasticity:	525	GPa
Modulus of rigidity:	213	GPa
Poisson's ratio:	0,23	
Thermal conductivity:	109,0	W/(m*K)
Thermal expansion coefficient:	6,4	10 ⁻⁶ /K
Fracture toughness:	> 20,0	MPa*m ^{1/2}

Yield strength = tensile strength

For WC-Co cemented carbide grades applies: The tensile strength is one third of the compression strength.

Microstructure:



WC grain size:	8,0 µm
Tungsten carbide:	85,00 wt%
Other carbides:	
Binder:	15,00 wt%