

Cemented carbide grade: V25

Physical properties:

Density:	14,40 ± 0,1	g/cm ³
Hardness:	1290 ± 30	HV30
Transverse rupture strength:	529,40	10 ³ psi
Compression strength:	4800	MPa
Modulus of elasticity:	570	GPa
Modulus of rigidity:	232	GPa
Poisson's ratio:	0,23	
Thermal conductivity:	112,0	W/(m*K)
Thermal expansion coefficient:	6,0	10 ⁻⁶ /K
Fracture toughness:	16,5	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:	2,5 µm
Tungsten carbide:	89,00 wt%
Other carbides:	
Binder:	11,00 wt%