

Cemented carbide grade: N07

Physical properties:

Density:	14,80 ± 0,1	g/cm ³
Hardness:	1650 ± 30	HV30
Transverse rupture strength:	464,13	10 ³ psi
Compression strength:	6550	MPa
Modulus of elasticity:	600	GPa
Modulus of rigidity:	246	GPa
Poisson's ratio:	0,22	
Thermal conductivity:	115,4	W/(m*K)
Thermal expansion coefficient:	5,6	10 ⁻⁶ /K
Fracture toughness:	8,4	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:	1,0 μm
Tungsten carbide:	93,50 wt%
Other carbides:	
Binder:	6,50 wt%