



The new GC grade family

Overview new carbide grade portfolio for wear part industry



Grade	GC200MC	GC150EC	GC150MC	GC110MC	GC070MC	GC080SNI	GC060F	GC100S	GC070S
Classification	G40	G30	G30	G20	G10		K15-K20	K20-K40	K10
Co %	20.0	15.0	15.0	11.0	7.0	8.5 Ni	6.0	10.0	7.0
WC incl. doping %	80.0	85.0	85.0	89.0	94.0	92.0	94.0	90.0	93.0
Hardness HV30 (± 50) kg/mm ²	1020	1050	1170	1310	1460	1600	1620	1620	1850
Fracture toughn. K _{IC} MPa · m ^{1/2}	*	*	*	14.5	10.6	10.0	9.9	10.6	9.6
Transverse rupt. strength N/mm ²	3100	2800	3000	2900	2700	3800	3200	4100	3500
Average grain size μm	1.3 – 2.5	> 6.0	1.3 – 2.5	1.3 – 2.5	1.3 – 2.5	0.5 – 0.8	0.8 – 1.3	0.5 – 0.8	0.5 – 0.8

* not measureable with testing method according Shetty.