

Grade	Chemical composition				Physical and mechanical properties							
	WC	TiC	TaC NbC	Co	Density g/cm <sup>3</sup>	Bending strength kg/mm <sup>2</sup>	Hardness HRA	Impact toughness kg.m/cm <sup>2</sup>	Thermal conductivity $\lambda$	Coefficient of lineexpansion $\alpha \times 10^{-5}$ (0-300 °C)	Coercivity Hc	Compressive strength kg/mm <sup>2</sup>
YG3X	96.5		0.5	3	15.0-15.3	110	91.5			4.1	170-200	
YG3	97			3	15.0-15.3	120	91					
YG4C	96			4	14.9-15.2	145	89.5					
YG6X	93.5		0.5	6	14.6-15.0	140	91			4.4	200-250	
YG8A	92		2.0	6	14.7-15.1	140	91.5					
YG6	94			6	14.6-15.0	145	89.5	0.26	0.19	4.5	120-160	460
YD10	90.5			7.5	14.7-15.0	160	92					
YG8N	91		2.2	8	14.5-14.9	150	89.5					
YG8	92			8	14.5-14.9	150	89	0.25	0.18	4.5	140-160	447
YG8C	92			8	14.5-14.9	175	88	0.30	0.18	4.8	50-70	390
(YK20)	90			10	14.3-14.6	230	86				50-70	
YG10C												
YG11C	89			11	14.0-14.4	210	86.5	0.38			80-95	
YG15	85			15	13.9-14.2	210	87	0.4	0.14	5.3	80-90	366
YG20	80			20	13.4-13.7	260	85.5	0.48		5.7	75-95	350
YG20C	80			20	13.4-13.6	220	82				46-52	
YG25	75			25	12.9-13.2	270	84.5	0.55			67-77	330
YG10H					14.5	220	91.5				250	
YT30	66	30		4	9.35-9.7	90	92.5	0.03	0.05		150-200	
YT05		10-12		6-8	12.5-12.9	120	92.5					
YT15	79	15		6	11.0-12.7	115	91		0.08	6.51	130-180	390
YT14	78	14		8	11.2-12.0	120	90.5	0.07	0.08	6.21	105-145	420
YT5	85	5		10	12.5-13.2	140	89.5		0.15	6.06	120-140	460
YTM30					12.55	180	91.0				160	