

# ULTRA CARBIDE



## The UC Grade Family

### Overview - Carbide Grade Portfolio



Grade		GC100SX	GC100SN	GC060F	GC100S	GC120U	GC080S	GC070S	GC090S	GC060S	GC090U
Classification		K30-K40	K20-K40	K15-K20	K20-K40	K20-K30	K20-K30	K10	K10	K05-K10	K05-K10
Co	%	10.0	10.0	6.0	10.0	12.0	8.0	7.0	9.0	6.0	9.0
WC incl. Doping	%	90.0	90.0	94.0	90.0	88.0	92.0	93.0	91.0	94.0	91.0
Hardness HV30 ( $\pm 50$ )	kg/mm <sup>2</sup>	1560	1580	1620	1620	1690	1720	1850	1850	1870	1920
Fracture toughn. KIC	MPa·m <sup>1/2</sup>	11.5	11.0	9.9	10.6	10.0	9.5	9.6	9.4	9.3	9.3
Transverse rupt. strength	N/mm <sup>2</sup>	3700	4100	3200	4100	4000	3800	3500	3800	3900	3800
Average grain size	$\mu\text{m}$	0.5 – 0.8	0.5 – 0.8	0.8 – 1.3	0.5 – 0.8	0.2 – 0.5	0.5 – 0.8	0.5 – 0.8	0.5 – 0.8	0.5 – 0.8	0.2 – 0.5

Explanation naming of the carbide grade:

GC = German Carbide | digit 1-3 = cobalt content | digit 4 = grain size classification | digit 5 = additional digit

Approved for Diamond coating

Our sales team is here to assist you. Please contact us at [sales@ultracarbide.com](mailto:sales@ultracarbide.com) or visit [www.ultracarbide.com](http://www.ultracarbide.com).