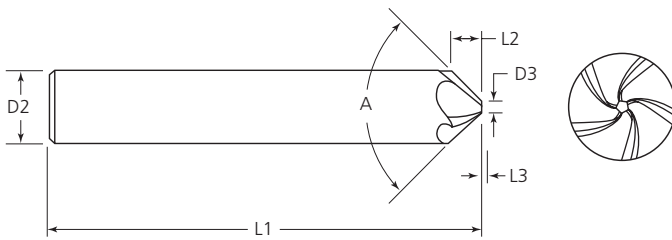


TuffCut® GP Series 5HC Helical Chamfer Mills



Features

- Helical Flute Form
- Precision flat tip diameter
- ALtima® Blaze coating

Benefits

- Smooth cutting action, higher feed and improved surface finish
- Increased strength, easy programming and excellent repeatability
- Extensive material range and increased tool-life

Tool Number	EDP	D2	D3	Angle	L1	L2	L3	GBP
5HCM06003B	35026	6.0	1.5	90°	57.0	2.25	0.75	£33.47
5HCM08003B	35027	8.0	1.75	90°	63.0	3.125	0.875	£38.29
5HCM10003B	35028	10.0	1.75	90°	72.0	4.125	0.875	£43.09
5HCM12003B	35029	12.0	2.0	90°	83.0	5.0	1.0	£70.40
5HCM16003B	35030	16.0	2.25	90°	92.0	6.875	1.125	£88.19

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Recommended Speeds by Material Group

Workpiece Material Group	Material Type	Coolant			Vc-m/min	Tool Diameter					
		Max	Air	MMS		6mm	8mm	10mm	12mm	16mm	
						fz-mm/tooth					
Steels	P	Low Carbon Steels	●	●	●	350	0.072	0.096	0.120	0.144	0.192
		Medium Carbon Steels	●	●	●	270	0.048	0.064	0.080	0.096	0.128
		Alloy Tool Steels	●	●	●	250	0.048	0.064	0.080	0.096	0.128
		Die/Tool Steels	●	●	●	220	0.042	0.056	0.070	0.084	0.112
Stainless Steels	M	Free Machining Stainless	●	X	○	180	0.042	0.056	0.070	0.084	0.112
		Austenitic Stainless	●	X	○	130	0.036	0.048	0.060	0.072	0.096
		Difficult Stainless	●	X	○	75	0.030	0.040	0.050	0.060	0.080
		PH Stainless	●	X	○	130	0.036	0.048	0.060	0.072	0.096
		Cobalt Chrome Alloys	●	X	○	75	0.030	0.040	0.050	0.060	0.080
		Duplex (22%)	●	X	○	75	0.030	0.040	0.050	0.060	0.080
		Super Duplex (25%)	●	X	○	55	0.030	0.040	0.050	0.060	0.080
Special Alloys	S	High Temp Alloys	●	X	X	45	0.030	0.040	0.050	0.060	0.080
		Titanium Alloys	●	X	X	100	0.036	0.048	0.060	0.072	0.096
Cast Irons	K	Grey Cast Iron	●	○	○	300	0.084	0.112	0.140	0.168	0.224
		Ductile Cast Iron	●	○	○	190	0.060	0.080	0.100	0.120	0.160
Hardened Steels	H	Hardened Steels 45 - 50HRC	○	●	○	80	0.030	0.040	0.050	0.060	0.080
		Hardened Steels 50 - 55HRC	○	●	○	60	0.036	0.048	0.060	0.072	0.096
Non Ferrous	N	Aluminium Alloys	●	X	○	600	0.072	0.096	0.120	0.144	0.192
		Brass / Bronze / Copper	●	X	○	350	0.054	0.072	0.090	0.108	0.144

● Preferred ○ Possible X Not Possible

Please note:

Technical data provided should be considered as advisory only and alterations may be necessary depending on the specific application.
Decreased feeds and/or a finish pass may be required to reach the desired surface finish requirements.
Decreased speeds and feeds may be required for heavy duty cutting.

Cutting speed (Vc) should be calculated from the effective cutting diameter using the following formula:

$(\text{Major diameter } D2 + \text{minor diameter } D3) / 2$.

Alternatively, estimate the actual diameter that is in contact with the workpiece.