

CP

PCD Cutting Data Recommendations

ISO Grade	Material	Application	Recommended Starting Parameters										
			Rad DOC	Axial DOC	SFM Range	SFM Starting	Chip Load Per Tooth						
							1/8	1/4	3/8	1/2	5/8	3/4	1
67-220-PCD Progressive Chipbreakers													
O	CFRP	Full Slotting	1 X DIA	.5 x DIA	750/1250	800	-	-	0.0010	0.0015	-	-	-
		Heavy Profile	.33 x DIA	1 x DIA		800	-	-	0.0015	0.0020	-	-	-
		HEM* Profile	.15 x DIA	1 x DIA		900	-	-	0.0020	0.0030	-	-	-
		Finishing	.05 x DIA	1 x DIA		1100	-	-	0.0020	0.0030	-	-	-
	GFRP	Full Slotting	1 X DIA	.5 X DIA	500/750	500	-	-	0.0010	0.0015	-	-	-
		Heavy Profile	.33 x DIA	.75 x DIA		500	-	-	0.0015	0.0025	-	-	-
		HEM* Profile	.15 x DIA	1 x DIA		600	-	-	0.0020	0.0030	-	-	-
		Finishing	.05 x DIA	1 x DIA		700	-	-	0.0020	0.0030	-	-	-
	Phenolic	Full Slotting	1 X DIA	.5 x DIA	750/1500	800	-	-	0.0010	0.0015	-	-	-
		Heavy Profile	.33 x DIA	1 x DIA		800	-	-	0.0015	0.0025	-	-	-
		HEM* Profile	.15 x DIA	1 x DIA		900	-	-	0.0020	0.0030	-	-	-
		Finishing	.05 x DIA	1 x DIA		1100	-	-	0.0020	0.0030	-	-	-

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68-000 PCD Tipped Tools													
O	CFRP	Full Slotting	1 X DIA	.5 x DIA	500/1000	800	-	0.0010	0.0015	0.0020	-	0.0030	-
		Heavy Profile	.33 x DIA	1 x DIA		800	-	0.0015	0.0020	0.0025	-	0.0035	-
		HEM* Profile	.15 x DIA	1 x DIA		800	-	0.0020	0.0025	0.0030	-	0.0040	-
		Finishing	.05 x DIA	1 x DIA		800	-	0.0010	0.0020	0.0030	-	0.0040	-
	GFRP	Full Slotting	1 X DIA	.5 x DIA	375/625	400	-	0.0010	0.0015	0.0020	-	0.0030	-
		Heavy Profile	.33 x DIA	1 x DIA		400	-	0.0015	0.0020	0.0025	-	0.0035	-
		HEM* Profile	.15 x DIA	1 x DIA		400	-	0.0020	0.0025	0.0030	-	0.0040	-
		Finishing	.05 x DIA	1 x DIA		400	-	0.0010	0.0020	0.0030	-	0.0040	-
	Phenolic	Full Slotting	1 X DIA	.5 x DIA	500/1000	500	-	0.0010	0.0015	0.0020	-	0.0030	-
		Heavy Profile	.33 x DIA	1 x DIA		500	-	0.0015	0.0020	0.0030	-	0.0040	-
		HEM* Profile	.15 x DIA	1 x DIA		600	-	0.0015	0.0020	0.0030	-	0.0040	-
		Finishing	.05 x DIA	1 x DIA		800	-	0.0020	0.0030	0.0040	-	0.0040	-

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							1/8	1/4	3/8	1/2	5/8	3/4	1
68-200-PCD SERF Cutter													
O	CFRP	Full Slotting	1 x DIA	1 x DIA	750/1250	800	-	0.0010	0.0015	0.0020	-	-	-
		Heavy Profile	.33 x DIA	1 x DIA		1000	-	0.0020	0.0030	0.0040	-	-	-
		HEM* Profile	.15 x DIA	1.5 x DIA		1000	-	0.0030	0.0040	0.0050	-	-	-
	GFRP	Full Slotting	1 x DIA	.5 x DIA	500/750	500	-	0.0010	0.0015	0.0020	-	-	-
		Heavy Profile	.33 x DIA	.75 x DIA		600	-	0.0020	0.0030	0.0040	-	-	-
		HEM* Profile	.15 x DIA	1 x DIA		600	-	0.0020	0.0030	0.0040	-	-	-
	Phenolic	Full Slotting	1 x DIA	1 x DIA	750/1500	800	-	0.0010	0.0015	0.0020	-	-	-
		Heavy Profile	.33 x DIA	1 x DIA		1000	-	0.0020	0.0030	0.0040	-	-	-
		HEM* Profile	.15 x DIA	1.5 x DIA		1200	-	0.0020	0.0030	0.0040	-	-	-

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68-300-PCD SERFIN Cutter													
O	CFRP	Full Slotting	1 x DIA	.5 x DIA	750/1250	800	-	-	0.0015	0.0020		0.0025	-
		Heavy Profile	.33 x DIA	1 x DIA		1000	-	-	0.0020	0.0025		0.0035	-
		HEM* Profile	.15 x DIA	1 x DIA		1000	-	-	0.0030	0.0030		0.0040	-
		Finishing	.05 x DIA	1 x DIA		1000	-	-	0.0020	0.0025		0.0035	-
	GFRP	Full Slotting	1 x DIA	.5 x DIA	500/750	500	-	-	0.0015	0.0020		0.0030	-
		Heavy Profile	.33 x DIA	.5 x DIA		500	-	-	0.0020	0.0030		0.0040	-
		HEM* Profile	.15 x DIA	1 x DIA		500	-	-	0.0020	0.0030		0.0040	-
		Finishing	.05 x DIA	1 x DIA		600	-	-	0.0020	0.0030		0.0040	-
	Phenolic	Full Slotting	1 x DIA	.5 x DIA	750/1500	800	-	-	0.0010	0.0020		0.0020	-
		Heavy Profile	.33 x DIA	1 x DIA		1000	-	-	0.0020	0.0030		0.0040	-
		HEM* Profile	.15 x DIA	1 x DIA		1200	-	-	0.0020	0.0030		0.0040	-
		Finishing	.05 x DIA	1 x DIA		1200	-	-	0.0020	0.0030		0.0040	-

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							1/8	1/4	3/8	1/2	5/8	3/4	1
68-400-PCD Ballnose													
O	CFRP	Heavy Profile	.25 - .5 x DIA	.5 x DIA	750/1000	800	-	0.0005	0.0010	0.0015	0.0017	0.0020	-
		-	-	-		-	-	-	-	-	-	-	
		Finishing	.05 x DIA	.05 x DIA		900	-	0.0020	0.0030	0.0035	0.0040	0.0045	-
	GFRP	Heavy Profile	.25 - .5 x DIA	.5 x DIA	350/600	375	-	0.0010	0.0020	0.0030	0.0035	0.0040	-
		-	-	-		-	-	-	-	-	-	-	
		Finishing	.05 x DIA	.05 x DIA		500	-	0.0020	0.0030	0.0040	0.0045	0.0050	-
	Phenolic	Heavy Profile	.25 - .5 x DIA	.5 x DIA	500/750	600	-	0.0010	0.0020	0.0030	0.0035	0.0040	-
		-	-	-		-	-	-	-	-	-	-	
		Finishing	.05 x DIA	.05 x DIA		700	-	0.0020	0.0030	0.0040	0.0045	0.0050	-

RPM
(3.82 x SFM) / tool diameter

SFM
RPM x .262 x tool diameter

FEED RATE (in / min)
chipload x # flutes x RPM

Feed / Tooth (in)
Feed Rate / (RPM x # Flutes)