

Diamond Coated Routers for Milling CFRP and Other Composites

List 2061: BNC, Nick Router

List 2066: HBC, Compression Router, 30° Helix List 2064: HBC 45, Compression Router, 45° Helix

Side Milling

Work Material	Carbon & Glass Fiber Reinforced Plastics	
Cutting Speed	400-800 SFM	
Depth of Cut	a a<1.5D aa	
Drill Diameter (Inch)	Speed RPM	Feed IPR
1/8	12,200 - 24,400	0.0011 - 0.0022
3/16	8,100 - 16,300	0.0021 - 0.0042
1/4	6,100 - 12,200	0.0033 - 0.0067
5/16	5,000 - 9,800	0.0047 - 0.0093
3/8	4,100 - 8,100	0.0067 - 0.0133
1/2	3,000 - 6,100	0.0111 - 0.0222

Slotting

Work Material	Carbon & Glass Fiber Reinforced Plastics	
Cutting Speed	300-600 SFM	
Depth of Cut	a a<1D	aa
Drill Diameter (Inch)	Speed RPM	Feed IPR
1/8	9,200 - 18,300	0.0016 - 0.0020
3/16	6,100 - 12,200	0.0020 - 0.0024
1/4	4,600 - 9,200	0.004 - 0.005
5/16	3,600 - 7,300	0.006 - 0.008
3/8	3,000 - 6,100	0.009 - 0.012
1/2	2,300 - 4,600	0.012 - 0.020

- 1. The conditions listed above are based on approximately 1xDc thickness of part with rigid work holding.
- 2. Conventional cut is recommended at part side for good surface finish.
- 3. Milling speed can be increased by 20-50% with the use of appropriate cutting oil.
- 4. Please provide appropriate measures against dust (Such as vacuum dust collection).
- 5. Depending on the workpiece thickness and form as well as work holding, vibration may occur. When it occurs, please adjust RPM and feed rate.

Feed Reduction

Material Thickness	Feed Reduction	
≤0.25D	x80%	
0.25D ~ 0.5D	x150%	
0.5D ~ 1D	x120%	
1D ~ 2D	x80%	
2D ~ 3D	x50%	

