

List 2068: HBC 60, Compression Router, 60° Helix

List 668: HBC 60, Compression Router, 60° Helix, Bright

## Side Milling

Work Material	Carbon & Glass Fiber Reinforced Plastics		Honeycomb Structures & Aramid Fiber Reinforced Plastics	
Cutting Speed	400-800 SFM		1,000-2,600 SFM	
Depth of Cut		<b>a</b> a<1.5D <b>a</b> r<1D	aa ar	
Drill Diameter (Inch)	Speed RPM	Feed IPR	Speed RPM	Feed IPR
1/4	6,100 - 12,200	0.0033 - 0.0067	15,300 - 39,700	0.0003 - 0.0007
3/8	4,000 - 8,100	0.0067 - 0.0133	10,100 - 26,500	0.0006 - 0.0009
1/2	3,000 - 6,100	0.0111 - 0.0222	7,600 - 19,900	0.0011 - 0.0014

## Slotting

Work Material	Carbon & Glass Fiber Reinforced Plastics		Honeycomb Structures & Aramid Fiber Reinforced Plastics	
Cutting Speed	300-600 SFM		750-1,900 SFM	
Depth of Cut		<b>a</b> a<1D	aa	
Drill Diameter (Inch)	Speed RPM	Feed IPR	Speed RPM	Feed IPR
1/4	4,600 - 9,200	0.0021 - 0.0043	11,500 - 29,000	0.0002 - 0.0005
3/8	4,000 - 8,000	0.0044 - 0.0089	7,600 - 19,400	0.0007 - 0.0011
1/2	3,000 - 6,100	0.0071 - 0.0143	5,700 - 14,500	0.0013 - 0.0017

- 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.

  6. Kevlar laminate machinability can vary greatly by fiber and resin. If hole quality is not achieved with the feed rates provided above, reducing the feed rates may produce better quality surfaces.

## **Feed Reduction**

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