

Herringbone Router - Diamond Coated



Metric

EDP Number	Mill Diameter	Compression Length	Length of Cut	OAL	Shank Diameter	No. of Flutes	Stock	Price
	D	L2	l	L	d			
48109001	6	7,5	15	65	6	4	●	
48109002	8	10	20	70	8	4	●	
48109003	10	12,5	25	75	10	4	●	
48109004	12	15	30	100	12	4	●	

Inch

EDP Number	Mill Diameter	Compression Length	Length of Cut	OAL	Shank Diameter	No. of Flutes	Stock	Price
	D	L2	l	L	d			
20660116	1/8	0,125	3/8	1 1/2	1/8	4	○	
20660316	1/4	0,250	3/4	2 1/2	1/4	4	○	
20660516	3/8	0,375	1 1/8	3	3/8	4	○	
20660716	1/2	0,500	1 1/8	3	1/2	4	○	

Packed: 1 pc. Available Diamond coating only.

Recommended Cutting Conditions

Speed m/min.	Side Milling		Slotting	
	120	240	90	180
	Aa: Up to 1,5D / Ar: Up to 1D		Aa: 1D	
Dia.	Feed mm/min.	Feed mm/min.	Feed mm/min.	Feed mm/min.
1/8	500	1.000	250	500
1/4 6mm	770	1.600	380	750
8 mm	900	1.800	450	900
3/8 10mm	1.000	2.000	510	1.000
1/2 12mm	1.300	2.600	630	1.300

Note: This table's parameters are based on common material thickness of approximately 0.250" under excellent workholding conditions and less than 20% x D depth of cut (side milling). Please adjust your parameters properly for your application or call OSG for assistance. Conventional milling is recommended for better surface finishes. Higher feed rates are possible but quality of part and surface should be considered.

Feed Reduction by Thickness of Part: Recommended feed adjustments based on thickness of part. (Above table is based on approximately 1xD thickness.)

≤0,5D	x 150%
0,5D-1D	x 120%
1D-2D	x 80%
3D-4D	x 50%



The DIA-HBC is a diamond coated herringbone style router for high feed rates and excellent surface finishes. The router features a compression cutting mechanism along with OSG's patented diamond coating.

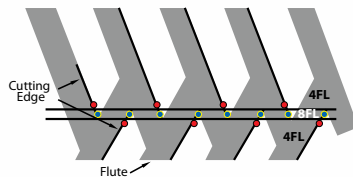
Performance Highlights

The DIA-HBC showed excellent performance and surface finished at high feed rates. The 4-flute herringbone design was able to mill up to 1.200mm/min. without leaving streak marks on the composite.

Tool	DIA-HBC	Competitor
	Herringbone Router - Diamond Coated	
Material	Carbon Fiber Composite	
Diameter	12 mm	
Number of Flutes	4	6
Milling Method	Side Milling	
Speed	6000 RPM	
Feed	600~1.200 mm/min.	
DOC	Aa: 6,35 mm / Ar: 3,17 mm	
Coolant	Dry	
Machine	VMC	

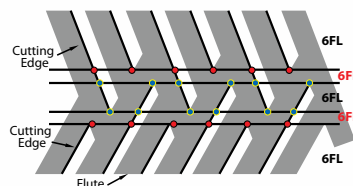
DIA-HBC

Clean milling at 1.200 mm/min.



Competitor

Streaking and Torn/Uncut Fibers



Applications

- ◆ Excels in carbon and glass composites and honeycombs
- ◆ High feed routing and finishing
- ◆ Best in thick laminates (Ref. L2 length on page 6)
- ◆ Excellent in thermoplastic matrix

Features

- ◆ Compression mechanism to neutralize cutting forces to prevent delamination on both top and bottom laminates
- ◆ Low cutting forces/ long tool life