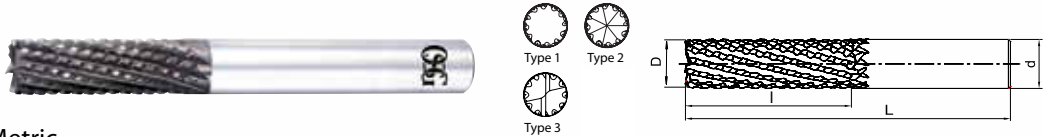


DIA-BNC

Fine Pitch Nicked Router - Diamond Coated



Metric

EDP Number	Mill Dia.	Length of Cut	OAL	Shank Diameter	No. of Flutes	Type	Stock	Price
	D	I	L	d				
48108001	6	18	68	6	8	2	●	
48108002	8	24	74	8	10	2	●	
48108003	10	30	80	10	12	2	●	
48108004	12	36	86	12	14	2	●	
48108011	6	18	68	6	8	3	●	
48108012	8	24	74	8	10	3	●	
48108013	10	30	80	10	12	3	●	
48108014	12	36	86	12	14	3	●	

Inch

EDP Number	Mill Dia.	Length of Cut	OAL	Shank Diameter	No. of Flutes	Type	Stock	Price
	D	I	L	d				
20610116	1/8	1/4	1 1/2	1/8	6	2	○	
20611116	1/8	3/8	1 1/2	1/8	6	3	○	
20612116	1/8	1/2	1 1/2	1/8	8	3	○	
20610216	3/16	3/8	2	3/16	6	2	○	
20611216	3/16	9/16	2	3/16	6	3	○	
20612216	3/16	3/4	2	3/16	8	3	○	
20610316	1/4	1/2	2 1/2	1/4	8	2	○	
20611316	1/4	3/4	2 1/2	1/4	10	3	○	
20612316	1/4	3/4	2 1/2	1/4	10	2	○	
20613316	1/4	1	3	1/4	10	3	○	
20614316	1/4	1	3	1/4	10	2	○	
20615316	1/4	1 1/4	4	1/4	12	1	○	
20610416	5/16	1	2 1/2	5/16	10	3	○	
20610516	3/8	3/4	2 1/2	3/8	12	2	○	
20611516	3/8	1 1/8	3	3/8	12	3	○	
20612516	3/8	1 1/8	3	3/8	12	2	○	
20613516	3/8	1 1/2	4	3/8	12	3	○	
20614516	3/8	1 1/2	4	3/8	12	2	○	
20615516	3/8	2	4	3/8	12	1	○	
20610716	1/2	1	3	1/2	14	3	○	
20611716	1/2	1	3	1/2	14	2	○	
20612716	1/2	2	4	1/2	16	2	○	

Packed: 1 pc. Available Diamond coating only.
 Type 1: No End Cut, Type 2: Burr End, Type 3: End Mill Cut

Recommended Cutting Conditions

Speed m/min.	Side milling		Slotting	
	120	240	90	180
Depth of Cut	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
3/16	630	1.300	300	600
1/4 6mm	770	1.600	380	750
5/16 8mm	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.

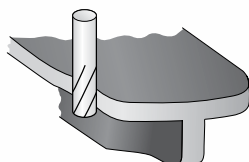
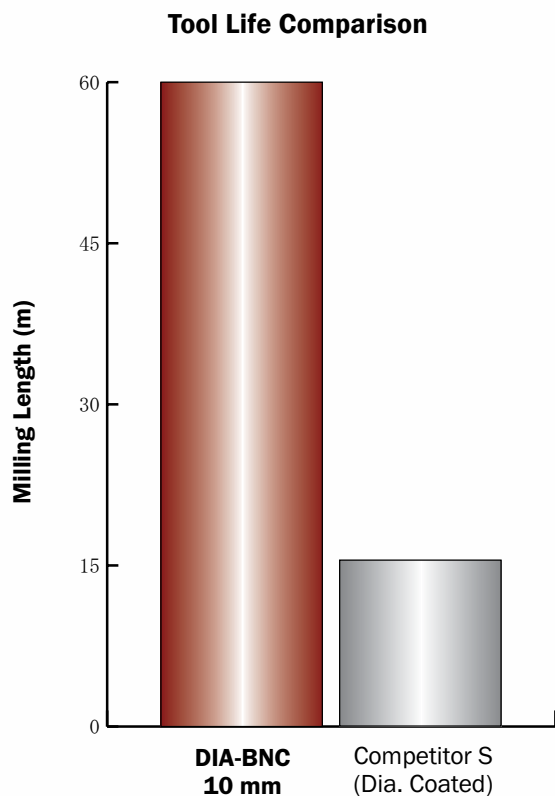
Feed Reduction: Recommended feed adjustments based on thickness of part.
 (Above table is based on approximately 1xD thickness.)

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

The DIA-BNC is a patented diamond coated fine nicked router specifically designed for carbon fiber composite trimming. The router features a patented cutting geometry coupled with OSG's patented diamond coating.

Performance Highlights

Although the details of the machining conditions cannot be disclosed, our products achieved approximately four times the tool life versus the competitor product (from company S).



Pictured on left:
End trimming of a CFRP stringer.

Applications

- ◆ Best in carbon fiber, also good for carbon/carbon and honeycombs
- ◆ High feed roughing and finishing
- ◆ Applied in both thick and thin laminates
- ◆ End cuts for plunging and face trimming
- ◆ Type 2 is for ramping & helical interpolation
Type 3 is for plunging and helical interpolation

Features

- ◆ Patented nick & flute form to eliminate uncut fibers & delamination
- ◆ Extremely low cutting forces/ long tool life
- ◆ Flute management can be applied

Flute Management

- ◆ By utilizing Flute Position Management*, tool life can be increased.



*To change the milling position at the flute