

## Diamond Grind Routers Series 230 / 231 231B / 231D / 231F

### Recommended Cutting Data - Inch

Slotting 300 (SFM)			Slotting 600 (SFM)			<p style="font-size: small;">D &lt; 1/8 Ap = .5D D &gt; 1/8 Ap = 1D Ae = 1D</p>	Side Milling 400 (SFM)			Side Milling 900 (SFM)			<p style="font-size: small;">Ap ≤ 1.5D Ae ≤ .2D</p>
Tool Diameter	RPM	IPM	Tool Diameter	RPM	IPM		Tool Diameter	RPM	IPM	Tool Diameter	RPM	IPM	
1/32	36000	29	1/32	73000	58	1/32	48000	39	1/32	90000	72		
3/64	24000	24	3/64	48000	48	3/64	32000	32	3/64	73000	73		
1/16	18000	27	1/16	36000	54	1/16	24000	36	1/16	55000	83		
3/32	12000	24	3/32	24000	48	3/32	16000	32	3/32	36000	72		
1/8	9100	22	1/8	18000	45	1/8	12000	30	1/8	27000	68		
3/16	6100	18	3/16	12000	36	3/16	8100	24	3/16	18000	54		
1/4	4500	16	1/4	9000	32	1/4	6100	21	1/4	13000	46		
5/16	3600	14	5/16	7000	28	5/16	4800	19	5/16	11000	44		

\*\* Tool must have end grind in order to slot.

Note: The parameters in this table are for common material thickness of 1/4". You must use the Radial Depth (Ae) of 20% or less for Side Milling. For best surface finish conventional mill is recommended. Higher feed rates are possible but surface finish may change.

### Recommended Cutting Data - Metric

Slotting 90 (m/min)			Slotting 182 (m/min)			<p style="font-size: small;">D &lt; 3mm Ap = .5D D &gt; 3mm Ap = 1D Ae = 1D</p>	Side Milling 120 (m/min)			Side Milling 240 (m/min)			<p style="font-size: small;">Ap ≤ 1.5D Ae ≤ .2D</p>
Tool Diameter	RPM	mm/min	Tool Diameter	RPM	mm/min		Tool Diameter	RPM	mm/min	Tool Diameter	RPM	mm/min	
0.8	35000	141	0.8	72000	289	0.8	47000	190	0.8	95000	381		
1	28000	226	1	57000	463	1	38000	305	1	76000	610		
1.2	23000	306	1.2	48000	627	1.2	31000	413	1.2	63000	826		
1.5	18000	376	1.5	38000	771	1.5	25000	508	1.5	50000	1017		
1.6	17000	388	1.6	36000	795	1.6	23000	524	1.6	47000	1049		
2	14000	423	2	28000	868	2	19000	572	2	38000	1145		
2.4	11000	447	2.4	24000	916	2.4	15000	604	2.4	31000	1208		
3	9400	480	3	19000	984	3	12000	648	3	25000	1297		
5	5600	395	5	11000	810	5	7600	534	5	15000	1068		
6	4700	423	6	9600	868	6	6300	572	6	12000	1145		
8	3500	353	8	7200	723	8	4700	477	8	9500	954		

\*\* Tool must have end grind in order to slot.

Note: The parameters in this table are for common material thickness of 6mm. You must use the Radial Depth (Ae) of 20% or less for Side Milling. For best surface finish conventional mill is recommended. Higher feed rates are possible but surface finish may change.



Made in USA

ISO 9001:2015 Certified

#### Safety Note

Always wear the appropriate personal protective equipment such as safety glasses and protective clothing when using solid carbide or HSS cutting tools. Machines should be fully guarded.

Technical data provided should be considered advisory only as variations may be necessary depending on the particular application.