

## List 7430: DG-EBML

## Contouring

Work	Graphite			
Material	Roughing		Finishing	
Cutting Speed	164 SFM		164 SFM	
Depth of Cut	aa Aa = 0.2D Ar = 0.2D		aa Aa = 0.03D Ar = 003D	
Mill Dia.	Speed	Feed	Speed	Feed
Inch	ŘРМ	in/min	ŘРМ	in/min
1/32	20,000	95	20,000	95
3/64	13,365	63	13,365	63
1/16	10,025	47	10,025	47
3/32	6,680	32	6,680	32
1/8	5,010	24	5,010	24
3/16	3,340	16	3,340	16
1/4	2,505	12	2,505	12
3/8	1,670	8	1,670	8
1/2	1,255	6	1,255	6

Set the ramping angle to be approximately 0.5°.

- 1. Adjust the speed, the feed rate, and the depth of cut to suit your operating conditions, such as the milling shape, machine rigidity, tool holder rigidity, and work holding force.
- 2. If you are unable to reach the speed and feed rate indicated in the table above, lower the speed and feed rate using the same ratio.
- 3. If the workpiece gets chipped or if the operation requires a higher level of milling precision, lower the feed rate as necessary.
- 4. Depending on the shape, if the workpiece chatters, lower the speed and feed rate using the same ratio.
- 5. To mill graphite, use a dedicated milling machine. To prevent inhalation of dust, use a dust collector and a dust mask when working around graphite.
- 6. During milling, keep the runout at the tip of the end mill to be less than 0.0004 inches (0.01 mm).
- 7. If a cut involves the shaping of a corner, use the corner radius process of the program, or adjust the speed so that it will not cause chattering, and reduce the speed at the corner at the same time (approximately 60%).

## List 7431: DG-LN-EBML

## Contouring

Work	Graphite			
Material	Roughing		Finishing	
Cutting Speed	82 SFM		82 SFM	
Depth of Cut	aa Aa = 0.2D Ar = 0.2D		aa Aa = 0.03D Ar = 003D	
Mill Dia.	Speed	Feed	Speed	Feed
Inch	ŘРМ	in/min		! / !
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1/32	10,000	31	10,000	31
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1/32	10,000	31	10,000	31
1/32 3/64	10,000 6,685	31 21	10,000 6,685	31 21
1/32 3/64 1/16	10,000 6,685 5,015	31 21 16	10,000 6,685 5,015	31 21 16
1/32 3/64 1/16 3/32	10,000 6,685 5,015 3,340	31 21 16 11	10,000 6,685 5,015 3,340	31 21 16 11
1/32 3/64 1/16 3/32 1/8	10,000 6,685 5,015 3,340 2,505	31 21 16 11 8	10,000 6,685 5,015 3,340 2,505	31 21 16 11 8
1/32 3/64 1/16 3/32 1/8 3/16	10,000 6,685 5,015 3,340 2,505 1,670	31 21 16 11 8 5	10,000 6,685 5,015 3,340 2,505 1,670	31 21 16 11 8 5

Set the ramping angle to be approximately 0.5°.

- 1. Adjust the speed, the feed rate, and the depth of cut to suit your operating conditions, such as the milling shape, machine rigidity, tool holder rigidity, and work holding force.
- 2. If you are unable to reach the speed and feed rate indicated in the table above, lower the speed and feed rate using the same ratio.
- 3. If the workpiece gets chipped or if the operation requires a higher level of milling precision, lower the feed rate as necessary.
- 4. Depending on the shape, if the workpiece chatters, lower the speed and feed rate using the same ratio.
- 5. To mill graphite, use a dedicated milling machine. To prevent inhalation of dust, use a dust collector and a dust mask when working around graphite.
- 6. During milling, keep the runout at the tip of the end mill to be less than 0.0004 inches (0.01 mm).
- 7. If a cut involves the shaping of a corner, use the corner radius process of the program, or adjust the speed so that it will not cause chattering, and reduce the speed at the corner at the same time (approximately 60%).

