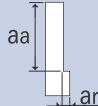




## List 3642 - EXOCARB® WXL-EML: 4 Flute, Square End, Long Length List 3742 - EXOCARB® WXL-EML: 4 Flute, Square End, Long Length

### Side Milling

Hardness		Up to 20 HRC		20 to 30 HRC		30 to 38 HRC		38 to 45 HRC		45 to 55 HRC																				
Work Material		Mild Steel Carbon Steels Cast Iron		Alloy Steels Tool Steels		Hardened Steels Pre-hardened Steels		Hardened Steels Pre-hardened Steels		Hardened Steels																				
Cutting Speed		200 SFM		160 SFM		130 SFM		110 SFM		80 SFM																				
Depth of Cut		<table border="1"> <tr><td>Di.</td><td>aa</td><td>ar</td></tr> <tr><td>D≤20</td><td>2.5D</td><td>0.05D</td></tr> <tr><td>20&lt;D</td><td>2.5D</td><td>0.1mm</td></tr> </table>			Di.	aa	ar	D≤20	2.5D	0.05D	20<D	2.5D	0.1mm				<table border="1"> <tr><td>Di.</td><td>aa</td><td>ar</td></tr> <tr><td>D≤8</td><td>1D</td><td>0.01D</td></tr> <tr><td>8&lt;D</td><td>1D</td><td>0.5mm</td></tr> </table>			Di.	aa	ar	D≤8	1D	0.01D	8<D	1D	0.5mm	aa = 2.5D ar = 0.02D	
		Di.	aa	ar																										
D≤20	2.5D	0.05D																												
20<D	2.5D	0.1mm																												
Di.	aa	ar																												
D≤8	1D	0.01D																												
8<D	1D	0.5mm																												
Mill Dia.		Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed	Speed	Feed																			
Inch	mm	RPM	in/min	RPM	in/min	RPM	in/min	RPM	in/min	RPM	in/min																			
1/16	-	11,900	8.8	10,000	7.5	7,930	5.9	6,990	0.0	3,960	2.9																			
5/64	-	9,520	8.8	8,000	7.5	6,350	5.9	5,590	0.0	3,170	2.9																			
3/32	-	7,930	8.8	6,670	7.5	5,290	5.9	4,660	0.0	2,640	2.9																			
7/64	-	6,800	8.8	5,710	7.5	4,530	5.9	3,990	0.0	2,260	2.9																			
-	3.0	6,350	8.9	5,300	7.5	4,200	5.9	3,700	5.2	2,100	2.9																			
1/8	-	5,950	8.8	5,000	7.5	3,960	5.9	3,490	0.0	1,980	2.9																			
-	3.5	5,450	8.9	4,540	7.5	3,590	5.9	3,170	5.2	1,790	2.9																			
5/32	-	4,760	8.8	4,000	7.5	3,170	5.9	2,790	0.0	1,580	2.9																			
-	4.0	4,750	8.9	3,950	7.5	3,150	5.9	2,750	5.2	1,550	2.9																			
-	4.5	4,240	8.9	3,530	7.5	2,790	5.9	2,460	5.2	1,390	2.9																			
3/16	-	3,960	8.8	3,330	7.5	2,640	5.9	2,330	0.0	1,320	2.9																			
-	5.0	3,800	8.9	3,150	7.5	2,500	5.9	2,200	5.2	1,250	2.9																			
-	5.5	3,470	8.9	2,890	7.5	2,290	5.9	2,010	5.2	1,140	2.9																			
7/32	-	3,400	8.8	2,850	7.5	2,260	5.9	2,000	0.0	1,130	2.9																			
-	6.0	3,150	8.8	2,650	7.5	2,100	5.9	1,850	5.2	1,050	3.0																			
1/4	-	2,970	8.8	2,500	7.5	1,980	5.9	1,750	0.0	990	3.0																			
-	6.5	2,930	8.9	2,440	7.5	1,930	5.9	1,700	5.2	960	3.0																			
-	7.0	2,720	8.9	2,270	7.5	1,790	5.9	1,580	5.2	890	3.0																			
-	7.5	2,540	8.9	2,110	7.5	1,670	5.9	1,470	5.2	830	3.0																			
5/16	-	2,380	8.8	2,000	7.5	1,580	5.9	1,400	0.0	790	3.0																			
-	8.0	2,350	8.8	1,950	7.5	1,550	5.9	1,350	5.1	995	3.8																			
-	8.5	2,240	8.9	1,870	7.5	1,480	5.9	1,300	5.2	740	3.8																			
-	9.0	2,120	8.9	1,760	7.5	1,390	5.9	1,230	5.2	690	3.8																			
-	9.5	2,010	8.9	1,670	7.5	1,320	5.9	1,160	5.2	660	3.8																			
3/8	-	1,980	8.8	1,660	7.5	1,320	5.9	1,160	0.0	660	3.8																			
-	10.0	1,900	8.9	1,550	7.5	1,250	5.9	1,100	5.2	795	3.7																			
-	10.5	1,810	8.9	1,510	7.5	1,190	5.9	1,050	5.2	590	3.7																			
-	11.0	1,730	8.9	1,440	7.5	1,140	5.9	1,000	5.2	570	3.7																			
-	11.5	1,660	8.9	1,380	7.5	1,090	5.9	960	5.2	540	3.7																			
-	12.0	1,550	8.7	1,300	7.5	1,050	6.0	925	5.3	660	3.8																			
1/2	-	1,480	8.8	1,250	7.5	990	6.0	870	0.0	490	3.8																			
-	13.0	1,460	8.8	1,220	7.5	960	6.0	850	5.2	480	3.8																			
-	14.0	1,350	8.8	1,100	7.5	905	6.0	795	5.2	565	3.7																			
-	15.0	1,270	8.9	1,050	7.5	830	6.0	730	5.2	410	3.7																			
5/8	-	1,190	8.8	1,000	7.5	790	6.0	700	0.0	390	3.7																			
-	16.0	1,150	8.6	995	7.5	795	6.2	695	5.4	495	3.8																			
-	18.0	1,050	8.8	880	7.5	705	6.0	615	5.2	440	3.7																			
-	20.0	955	8.9	795	7.5	635	5.9	555	5.2	395	3.7																			
-	23.0	830	8.9	690	7.5	540	5.9	480	5.2	270	3.7																			
-	24.0	795	8.7	660	7.1	530	5.8	460	5.0	330	3.6																			
-	25.0	760	8.3	635	6.7	505	5.5	445	4.9	315	3.4																			
-	26.0	730	7.9	610	6.3	480	5.2	420	4.6	240	3.1																			

1. Use a rigid and precise machine and holder.
2. When chattering occurs, reduce the speed and feed simultaneously,
3. Use a suitable cutting fluid with high smoke retardant.

ABOUT OSG

DRILLING

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INDEX

