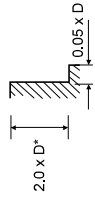


Cutting Conditions 173329, 174329, 175329, 176329 (6 Flute VX6) **TROCHOIDAL**

MATERIAL GROUP	Type of cut	Diameter (mm)								
		6.0	8.0	10.0	12.0	16.0	20.0	25.0		
<b>P</b>		<b>300 (240-360)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		11	15915	11937	9549	7958		5968	4775	3820
		12	0.068	0.116	0.144	0.173		0.202	0.225	0.232
		13	6494	8308	8251	8260		7234	6446	5317
<b>H</b>		<b>203 (162-244)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		13	10769	8077	6462	5385		4039	3231	2585
		14	0.050	0.085	0.106	0.128		0.149	0.167	0.174
		15	3231	4119	4110	4135		3610	3237	2698
<b>M</b>		<b>100 (60-120)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		16	5305	3979	3163	2653		1989	1592	1273
		17	0.041	0.071	0.088	0.105		0.123	0.137	0.144
		18	1305	1695	1681	1681		1468	1308	1100
<b>S</b>		<b>213 (170-256)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		21	11300	8475	6780	5650		4238	3390	2712
		22	0.049	0.084	0.104	0.125		0.146	0.162	0.168
		23	3322	4271	4231	4238		3712	3294	2734
<b>S</b>		<b>147 (118-176)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		24	7799	5849	4679	3899		2924	2340	1872
		25	0.041	0.071	0.088	0.105		0.123	0.137	0.143
		26	1918	2492	2471	2457		2158	1923	1606
<b>S</b>		<b>134 (107-161)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		27	7109	5332	4265	3554		2666	2133	1706
		28	0.041	0.071	0.088	0.105		0.123	0.137	0.142
		29	1749	2271	2252	2239		1967	1753	1454
<b>S</b>		<b>213 (170-256)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		30	11300	8475	6780	5650		4238	3390	2712
		31	0.033	0.055	0.070	0.083		0.097	0.113	0.117
		32	2239	2798	2849	2815		2467	2300	1905
<b>S</b>		<b>60 (50-70)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		33	3185	2389	1911	1592		1194	955	764
		34	0.033	0.055	0.070	0.082		0.097	0.112	0.115
		35	631	788	803	783		695	642	527



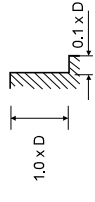
**TROCHOIDAL MILLING**

**\*If tool's length of cut is below 2xD use 90% of the length.**  
**\*Long length tools can be used up to 4xD if rigidity is 100%.**  
 Recommended cutting depths are **maximum** depths, and **speeds and feeds** are a **starting point** based on these depths.  
 All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.

v<sub>c</sub> - cutting speed (m/min)  
 n - RPM (rev/min)  
 f<sub>t</sub> - feed per tooth (mm)  
 f - feed rate (mm/min)  
 a<sub>r</sub> - axial depth of cut  
 a<sub>e</sub> - radial depth of cut

Cutting Conditions 173329, 174329, 175329, 176329 (6 Flute VX6) **CONVENTIONAL**

MATERIAL GROUP	Type of cut	Diameter (mm)								
		6.0	8.0	10.0	12.0	16.0	20.0	25.0		
<b>P</b>		<b>151 (121-181)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		11	7998	5988	4799	3999		2999	1919	
		12	0.022	0.035	0.043	0.053		0.061	0.069	0.075
		13	1056	1224	1238	1272		1098	993	864
<b>H</b>		<b>126 (101-152)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		14	6705	5029	4023	3353		2514	2012	1609
		15	0.017	0.028	0.035	0.041		0.049	0.053	0.058
		16	684	845	845	825		739	640	560
<b>M</b>		<b>70 (56-84)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		17	3716	2787	2230	1858		1394	1115	892
		18	0.012	0.019	0.024	0.029		0.033	0.037	0.040
		19	268	318	321	323		276	247	214
<b>M</b>		<b>131 (105-157)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		20	6947	5211	4168	3474		2605	2084	1667
		21	0.017	0.028	0.035	0.041		0.049	0.053	0.058
		22	709	875	875	855		766	663	580
<b>M</b>		<b>93 (74-112)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		23	4928	3696	2957	2464		1848	1478	1183
		24	0.012	0.021	0.027	0.031		0.038	0.043	0.048
		25	326	466	479	458		421	381	341
<b>S</b>		<b>85 (68-102)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		26	4524	3393	2714	2262		1696	1354	1086
		27	0.012	0.021	0.027	0.031		0.038	0.043	0.048
		28	326	428	440	421		387	350	313
<b>S</b>		<b>93 (74-112)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		29	4928	3696	2957	2464		1848	1478	1183
		30	0.014	0.023	0.029	0.036		0.044	0.048	0.053
		31	426	510	514	532		488	426	376
<b>S</b>		<b>26 (21-31)</b>					v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min) v <sub>c</sub> (m/min) n f <sub>t</sub> f (mm/min)			
		32	1373	1030	824	687		515	412	330
		33	0.012	0.021	0.027	0.031		0.038	0.043	0.048
		34	99	130	104	128		117	106	95



**CONVENTIONAL MILLING**

**\*For long length tools reduce feed by up to 50%.**  
 Recommended cutting depths are **maximum** depths, and **speeds and feeds** are a **starting point** based on these depths.  
 All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.

v<sub>c</sub> - cutting speed (m/min)  
 n - RPM (rev/min)  
 f<sub>t</sub> - feed per tooth (mm)  
 f - feed rate (mm/min)  
 a<sub>r</sub> - axial depth of cut  
 a<sub>e</sub> - radial depth of cut