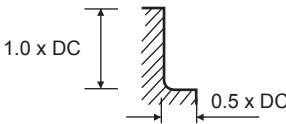
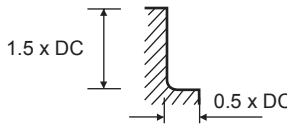


## CUTTING DATA

140323, 142323 (4 Flute, Corner Radius)											
VDI MATERIAL GROUP	HRC	Size (mm)									
		2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0		
<b>P</b>	1-5 Non-alloy Steel	<25	$v_c$ (m/min)	60	70	80	85	90	90	85	90
			$n$	9550	7425	6365	5410	4775	3580	2705	2385
			$f_z$	0.006	0.009	0.019	0.024	0.029	0.043	0.047	0.047
			$f$ (mm/min)	230	265	485	520	555	615	510	450
	6-9 Low alloy Steel	25-35	$v_c$ (m/min)	60	70	80	85	90	90	85	90
			$n$	9550	7425	6365	5410	4775	3580	2705	2385
			$f_z$	0.006	0.009	0.019	0.024	0.029	0.043	0.047	0.047
			$f$ (mm/min)	230	265	485	520	555	615	510	450
<b>M</b>	12-13 Ferritic/ Martensitic Stainless Steel	$v_c$ (m/min)	35	35	40	40	45	45	45	45	
		$n$	5570	3715	3180	2545	2385	1790	1430	1195	
		$f_z$	0.006	0.009	0.018	0.024	0.029	0.042	0.044	0.045	
		$f$ (mm/min)	135	135	230	245	275	300	250	215	
<b>K</b>	15-20 Cast Iron	$v_c$ (m/min)	60	55	60	55	55	55	60	55	
		$n$	9550	5835	4775	3500	2920	2190	1910	1460	
		$f_z$	0.017	0.026	0.065	0.044	0.065	0.093	0.116	0.155	
		$f$ (mm/min)	650	605	665	615	760	815	885	905	
<b>N</b>	21-24 Aluminium/ Aluminium Alloys	$v_c$ (m/min)	140	145	140	145	145	145	145	140	
		$n$	22280	15385	11140	9230	7690	5770	4615	3715	
		$f_z$	0.015	0.021	0.03	0.036	0.047	0.063	0.078	0.095	
		$f$ (mm/min)	1335	1290	1335	1330	1445	1455	1440	1410	
	26-27 Copper/ Copper Alloys	$v_c$ (m/min)	105	105	110	105	105	110	105	105	
		$n$	16710	11140	8755	6685	5570	4375	3340	2785	
		$f_z$	0.016	0.024	0.029	0.038	0.048	0.063	0.081	0.096	
		$f$ (mm/min)	1070	1070	1015	1015	1070	1100	1080	1070	

<p>MATERIAL GROUPS P, M</p> 	<p>MATERIAL GROUPS K, N</p> 
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► The feed rate for long, long reach and uncoated tools should be reduced 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.  
**For long series and long necked tools** it may be necessary to reduce feed rate by up to 50%.

$v_c$  - cutting speed (m/min)  
 $n$  - RPM (rev/min)  
 $f_z$  - feed per tooth (mm)  
 $f$  - feed rate (mm/min)  
 $a_p$  - axial depth of cut  
 $a_e$  - radial depth of cut