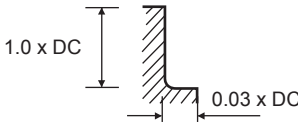


## CUTTING DATA

101650, 101750 (4 Flute Crn Rad Extended Neck)										
VDI MATERIAL GROUP	MATERIAL	HRc		Size (mm)						
				3.0	4.0	6.0	8.0	10.0	12.0	
<b>P</b>	10-11	High alloy Steel, Tool Steel	35-45	$v_c$ (m/min)	165	165	195	195	195	200
				$n$	17515	13135	10350	7760	6210	5305
				$f_z$	0.014	0.02	0.027	0.035	0.041	0.048
				$f$ (mm/min)	980	1050	1115	1085	1015	1015
<b>H</b>	38	Hardened Steel	40-50	$v_c$ (m/min)	165	165	195	195	195	200
				$n$	17515	13135	10350	7760	6210	5305
				$f_z$	0.014	0.02	0.027	0.035	0.041	0.048
				$f$ (mm/min)	980	1050	1115	1085	1015	1015
		Hardened Steel	50-55	$v_c$ (m/min)	110	110	130	130	130	130
				$n$	11675	8755	6900	5175	4140	3450
				$f_z$	0.015	0.02	0.028	0.035	0.041	0.048
				$f$ (mm/min)	700	700	770	525	675	660
	39	Hardened Steel	55-65	$v_c$ (m/min)	70	70	80	80	80	80
				$n$	7430	5570	4245	3185	2545	2120
				$f_z$	0.009	0.012	0.017	0.021	0.024	0.029
				$f$ (mm/min)	265	265	285	265	245	245
	40	Hardened Steel	65-70	$v_c$ (m/min)	60	60	70	70	70	70
				$n$	6365	4775	3715	2785	2225	1855
				$f_z$	0.007	0.01	0.014	0.017	0.02	0.023
				$f$ (mm/min)	175	190	205	185	175	170
	41	Chilled Cast Iron		$v_c$ (m/min)	205	210	245	250	245	250
				$n$	21760	16720	13000	9950	7800	6635
				$f_z$	0.016	0.022	0.03	0.038	0.045	0.053
				$f$ (mm/min)	1390	1470	1560	1510	1400	1405
41	Hardened Cast Iron		$v_c$ (m/min)	165	165	195	195	195	200	
			$n$	17515	13135	10350	7760	6210	5305	
			$f_z$	0.014	0.02	0.027	0.035	0.041	0.048	
			$f$ (mm/min)	980	1050	1115	1085	1015	1015	



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