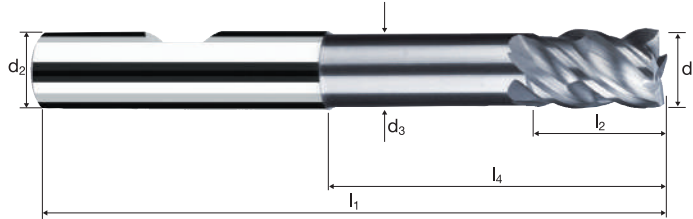


# Cylindrical end mills NX

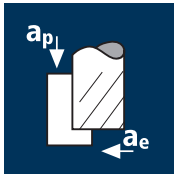
Smooth-edged, medium length version, neck



<b>Rm</b> 850-1100	<b>Rm</b> 1100-1300	<b>Rm</b> 1300-1500	<b>HRC</b> 48-56	<b>HRC</b> 56-60	<b>Ti</b> Titanium	<b>GG(G)</b> Tool Steel
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Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h6	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	45°	α	z	POLYCHROM		
											Example: Order-N°.	Coating	Article-N°.
											<b>P</b>	<b>15359</b>	<b>220</b>
220	4.00	6.00	3.70	63	6.00	22.00	26.95	0.10	2.5°	4			
260	5.00	6.00	4.60	63	8.00	24.00	27.27	0.15	1.5°	4			
300	6.00	6.00	5.50	63	9.00	25.34	26.00	0.15	0.0°	4			
391	8.00	8.00	7.40	72	12.00	34.29	35.00	0.15	0.0°	4			
450	10.00	10.00	9.20	84	15.00	42.20	43.00	0.20	0.0°	4			
501	12.00	12.00	11.00	97	18.00	50.13	51.00	0.20	0.0°	4			
610	16.00	16.00	15.00	108	24.00	58.13	59.00	0.20	0.0°	4			

## Application



## Material

Steel  
850 - 1100 N/mm<sup>2</sup>



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
4.00	4	150	0.025	4.000	1.800	11935	1195	8.6
5.00	4	150	0.035	5.000	2.250	9550	1335	15.0
6.00	4	150	0.040	6.000	2.700	7960	1275	20.6
8.00	4	150	0.055	8.000	3.600	5970	1315	37.8
10.00	4	150	0.065	10.000	4.500	4775	1240	55.9
12.00	4	150	0.080	12.000	5.400	3980	1275	82.5
16.00	4	150	0.090	16.000	7.200	2985	1075	123.8

Steel  
1100 - 1300 N/mm<sup>2</sup>



4.00	4	115	0.025	4.000	1.800	9150	915	6.6
5.00	4	115	0.035	5.000	2.250	7320	1025	11.5
6.00	4	115	0.040	6.000	2.700	6100	975	15.8
8.00	4	115	0.055	8.000	3.600	4575	1005	29.0
10.00	4	115	0.065	10.000	4.500	3660	950	42.8
12.00	4	115	0.080	12.000	5.400	3050	975	63.3
16.00	4	115	0.090	16.000	7.200	2290	825	94.9

Steel  
1300 - 1500 N/mm<sup>2</sup>



4.00	4	80	0.025	4.000	1.800	6365	635	4.6
5.00	4	80	0.030	5.000	2.250	5095	610	6.9
6.00	4	80	0.035	6.000	2.700	4245	595	9.6
8.00	4	80	0.045	8.000	3.600	3185	575	16.5
10.00	4	80	0.060	10.000	4.500	2545	610	27.5
12.00	4	80	0.070	12.000	5.400	2120	595	38.5
16.00	4	80	0.080	16.000	7.200	1590	510	58.7

Titanium alloys  
> 300 HB  
[Ti6Al4V]



4.00	4	50	0.015	4.000	1.800	3980	240	1.7
5.00	4	50	0.020	5.000	2.250	3185	255	2.9
6.00	4	50	0.020	6.000	2.700	2655	210	3.4
8.00	4	50	0.025	8.000	3.600	1990	200	5.7
10.00	4	50	0.035	10.000	4.500	1590	225	10.0
12.00	4	50	0.040	12.000	5.400	1325	210	13.8
16.00	4	50	0.050	16.000	7.200	995	200	22.9



Steel  
850 - 1100 N/mm<sup>2</sup>



4.00	4	115	0.020	3.200	4.000	9150	730	9.4
5.00	4	115	0.025	4.000	5.000	7320	730	14.6
6.00	4	115	0.035	4.800	6.000	6100	855	24.6
8.00	4	115	0.045	6.400	8.000	4575	825	42.2
10.00	4	115	0.055	8.000	10.000	3660	805	64.4
12.00	4	115	0.065	9.600	12.000	3050	795	91.4
16.00	4	115	0.075	11.200	16.000	2290	685	123.0

Steel  
1100 - 1300 N/mm<sup>2</sup>



4.00	4	90	0.020	3.200	4.000	7160	575	7.3
5.00	4	90	0.025	4.000	5.000	5730	575	11.5
6.00	4	90	0.035	4.800	6.000	4775	670	19.3
8.00	4	90	0.045	6.400	8.000	3580	645	33.0
10.00	4	90	0.055	8.000	10.000	2865	630	50.4
12.00	4	90	0.065	9.600	12.000	2385	620	71.5
16.00	4	90	0.075	11.200	16.000	1790	535	96.3

Steel  
1300 - 1500 N/mm<sup>2</sup>



4.00	4	65	0.020	3.200	4.000	5175	415	5.3
5.00	4	65	0.025	4.000	5.000	4140	415	8.3
6.00	4	65	0.030	4.800	6.000	3450	415	11.9
8.00	4	65	0.040	6.400	8.000	2585	415	21.2
10.00	4	65	0.050	8.000	10.000	2070	415	33.1
12.00	4	65	0.060	9.600	12.000	1725	415	47.7
16.00	4	65	0.070	11.200	16.000	1295	360	64.9

Titanium alloys  
> 300 HB  
[Ti6Al4V]



4.00	4	40	0.015	3.200	4.000	3185	190	2.4
5.00	4	40	0.015	4.000	5.000	2545	155	3.1
6.00	4	40	0.020	4.800	6.000	2120	170	4.9
8.00	4	40	0.025	6.400	8.000	1590	160	8.1
10.00	4	40	0.035	8.000	10.000	1275	180	14.3
12.00	4	40	0.040	9.600	12.000	1060	170	19.6
16.00	4	40	0.045	11.200	16.000	795	145	25.7