TOOLING SYSTEMS PROCESS OPTIMIZATION CONSULTING IN MILLING STRATEGIES

UGT SOLID CARBIDE END MILLS

UGT SHARP-CORNER + CORNER RADIUS END MILLS FOR STAINLESS STEEL AND HEAT-RESISTANT ALLOYS

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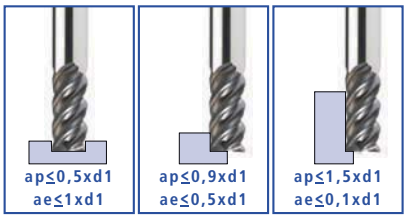
PREMIUMTOOLS. WE KNOW HOW.

Cutting Speeds

for machining stainless steel and heat-resistant alloys

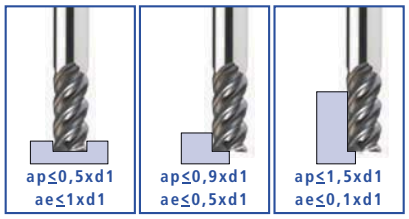
stainless steel: 1.4301, 1.4541, 1.4307 etc.



feed per tooth fz Vc=80 m/min

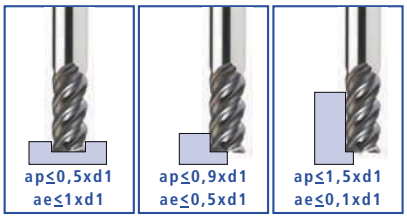
d_1	fz	fz	fz		d_1	fz	fz	fz
3	0,015	0,018	0,015		3	0,010	0,015	0,018
4	0,020	0,023	0,020		4	0,013	0,020	0,025
5	0,025	0,029	0,025		5	0,019	0,025	0,031
6	0,030	0,035	0,040		6	0,024	0,030	0,036
8	0,040	0,047	0,054		8	0,034	0,040	0,053
10	0,055	0,064	0,073		10	0,044	0,055	0,071
12	0,065	0,075	0,085		12	0,056	0,065	0,077
16	0,085	0,100	0,115		16	0,071	0,085	0,089
20	0,105	0,120	0,135		20	0,087	0,950	0,100
25	0,120	0,140	0,160		25	0,100	0,120	0,140

1.4401, 1.4571, 1.4404 etc.



feed per tooth fz Vc=40 m/min

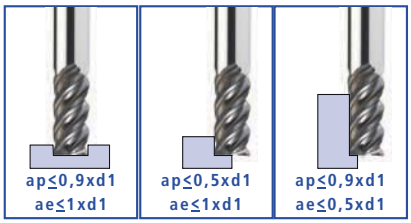
heat resistant alloys: 1.4542 etc.



feed per tooth fz Vc=25 m/min

d_1	fz	fz	fz		d_1	fz	fz	fz
3	0,004	0,007	0,010		3	0,004	0,007	0,010
4	0,006	0,010	0,015		4	0,006	0,010	0,015
5	0,010	0,014	0,020		5	0,010	0,014	0,020
6	0,015	0,020	0,025		6	0,015	0,020	0,025
8	0,025	0,030	0,035		8	0,025	0,030	0,035
10	0,030	0,035	0,040		10	0,030	0,035	0,040
12	0,040	0,045	0,050		12	0,040	0,045	0,050
16	0,050	0,060	0,065		16	0,050	0,060	0,065
20	0,060	0,070	0,075		20	0,060	0,070	0,075
25	0,070	0,080	0,085		25	0,070	0,080	0,850

Inconel 218 etc.



feed per tooth fz Vc=15 m/min

These speed and feed values are approximate. Customer-specific factors, such as input power, machine stability, tool overhang etc. are not taken into consideration. In order to guarantee optimum and efficient cutting conditions with our tools, please ask our office or one of our applications engineers.

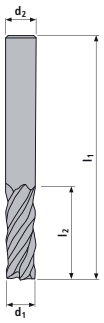
End Mills UGT

4 teeth, for machining stainless steel and heat-resistant alloys

0504 56

4-flute end mills, plain shank, shark corner, centre cutting, PVST-coated

- with or without clamping flats
- unequal division
- unequal helix angle

SOLID CARBIDE END MILLS	Catalogue-No.	d_1	l_2	l_3	d_3	l_1	r	d_2	z	Characteristics		
	0504 56 030	3	8	-	-	57	-	6	4	MGC	PVST	
	0504 56 040	4	10	-	-	57	-	6	4	MGC	PVST	
	0504 56 050	5	12	-	-	57	-	6	4	MGC	PVST	
	0504 56 060	6	16	-	-	57	-	6	4	MGC	PVST	
	0504 56 080	8	20	-	-	63	-	8	4	MGC	PVST	
	0504 56 100	10	26	-	-	72	-	10	4	MGC	PVST	
	0504 56 120	12	30	-	-	83	-	12	4	MGC	PVST	
	0504 56 160	16	37	-	-	92	-	16	4	MGC	PVST	
	0504 56 200	20	44	-	-	104	-	20	4	MGC	PVST	
	0504 56 250	25	50	-	-	104	-	25	4	MGC	PVST	

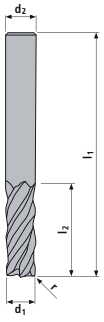
Corner Radius End Mills UGT

4 teeth, for machining stainless steel and heat-resistant alloy

0514 56

4-flute end mills, plain shank, shark corner, centre cutting, corner radius, PVST-coated

- with or without clamping flats
- unequal division
- unequal helix angle

SOLID CARBIDE END MILLS	Catalogue-No.	d_1	l_2	l_3	d_3	l_1	r	d_2	z	Characteristics		
	0514 56 030	3	8	-	-	57	0,2	6	4	MGC	PVST	
	0514 56 040	4	10	-	-	57	0,3	6	4	MGC	PVST	
	0514 56 050	5	12	-	-	57	0,4	6	4	MGC	PVST	
	0514 56 060	6	16	-	-	57	0,5	6	4	MGC	PVST	
	0514 56 080	8	20	-	-	63	0,5	8	4	MGC	PVST	
	0514 56 100	10	26	-	-	72	1,0	10	4	MGC	PVST	
	0514 56 120	12	30	-	-	83	1,0	12	4	MGC	PVST	
	0514 56 160	16	37	-	-	92	2,0	16	4	MGC	PVST	
	0514 56 200	20	44	-	-	104	2,0	20	4	MGC	PVST	
	0514 56 250	25	50	-	-	104	3,0	25	4	MGC	PVST	

QUALIFICATION TABLE 0504 56 | 0514 56	steel	heat-resistant alloys	stainless steel	cast iron	non-ferrous-metals / materials	hardened steel	grade	coating
A		▼	▼			▼		

major application ▼ roughing ▼ pre-finishing ▼ finishing

major application ▽ roughing ▽ pre-finishing ▽ finishing

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UGT SOLID CARBIDE END MILLS

P-F-UGTE 1108

Applications:

- machining of stainless- and acid-resistant materials
- machining of titanium- and nickel-based alloys
- for minor applications, these tools are also suitable for machining of hardened steel up to 58 HRC (using optimum milling strategies)
- for slot milling up to 1.5 x D cutting depth
- for contour-milling total cutting length can be used

Your advantages:

- roughing and finishing with one tool
- outstanding surface-finish in finishing operations
- unequal division and unequal helix angles allow vibration-free machining and extremely smooth running
- increased process reliability and extended tool-life
- efficient machining of difficult machinable materials
- end mill diameters from 3 to 25 mm

CONTACT

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