

**Garant**
**GARANT Master UNI solid carbide roughing end mill HPC, TiSiN, Ø e8 DC: 6mm**

**Order data**

Order number	203062 6
GTIN	4062406569556
Item class	11Z

**Description**
**Version:**

For **roughing and finishing at very high feed rates** with smooth cutting action. **Newly developed geometry and high-performance coating** for outstanding production results and very long tool life with a variety of materials. Unequal spacing gives **high intrinsic stability** and smooth cutting action.

**Advantage:**

- **Particularly low vibration running.**
- **Special flute profile, large flutes.**
- **Specially matched edge honing.**
- **Optimised substrate for hardness and toughness.**

Tolerance nominal Ø: e8

No. of teeth Z: 4

Helix angle: 42 °

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 4

Flute length L<sub>c</sub>: 10 mm

Overhang length L<sub>1</sub> incl. recess: 16 mm

Recess Ø D<sub>1</sub>: 5.8 mm

Overall length L: 54 mm

Shank Ø D<sub>s</sub>: 6 mm

**Technical description**

Tolerance nominal Ø	e8
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Feed $f_z$ for slot milling in steel $< 900 \text{ N/mm}^2$	0.04 mm
Recess $\varnothing D_1$	5.8 mm
Direction of infeed	horizontal, oblique and vertical
Cutting edge $\varnothing D_c$	6 mm
Shank $\varnothing D_s$	6 mm
Overall length L	54 mm
Feed $f_z$ for side milling in INOX $> 900 \text{ N/mm}^2$	0.03 mm
Shank	DIN 6535 HB to h6
Corner rounding $r_v$	0.1 mm
Feed $f_z$ for side milling in steel $< 900 \text{ N/mm}^2$	0.05 mm
Feed $f_z$ for slot milling in stainless steel $> 900 \text{ N/mm}^2$	0.025 mm
Overhang length $L_1$ incl. recess	16 mm
Flute length $L_c$	10 mm
No. of teeth Z	4
Helix angle	$42^\circ$
Coating	TiSiN
Tool material	solid carbide
Standard	Manufacturer's standard
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

## User data

	<b>Suitability</b>	<b>V<sub>c</sub></b>	<b>ISO code</b>
Aluminium (short chipping)	suitable only under restricted conditions	280 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	260 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	240 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	190 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	150 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	80 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	40 m/min	S
GG(G)	suitable	250 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		