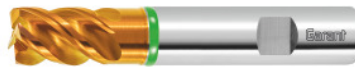


**Garant**
**GARANT Master UNI solid carbide milling cutter HPC, TiSiN, Ø e8 DC: 20mm**


## Order data

Order number	203062 20
GTIN	4062406569600
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.**

## Technical description

Direction of infeed	horizontal, oblique and vertical
Flute length $L_c$	26 mm
Recess $\varnothing D_1$	19.5 mm
Overall length L	92 mm
Cutting edge $\varnothing D_c$	20 mm
Shank $\varnothing D_s$	20 mm
Feed $f_z$ for side milling in steel $< 900 \text{ N/mm}^2$	0.13 mm
Corner rounding $r_v$	0.3 mm
Overhang length $L_1$ incl. recess	40 mm

Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>	0.08 mm
Shank	DIN 6535 HB to h6
Tolerance nominal $\varnothing$	e8
Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup>	0.1 mm
Feed $f_z$ for slot milling in stainless steel > 900 N/mm <sup>2</sup>	0.07 mm
Helix angle	42 degrees
No. of teeth Z	4
Series	Master Uni
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 1xD
Cutting width $a_e$ for milling operation	Full slot cutting depth 1xD
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
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		