

Garant**GARANT Master UNI solid carbide roughing end mill HPC, TiSiN, Ø e8 DC: 20 mm****Order data**

Order number	203067 20
GTIN	4062406569693
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:

Especially for **MTC (Multi Task Cutting)** use on the new generation of turning / milling centres.

Tolerance nominal Ø: e8

No. of teeth Z: 4

Helix angle: 42 degrees

Direction of infeed: horizontal, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 4

Flute length L_c : 41 mm

Overhang length L_1 incl. recess: 52 mm

Recess Ø D_1 : 19.5 mm

Overall length L: 104 mm

Shank Ø D_s : 20 mm

Technical description

Helix angle	42 degrees
Flute length L_c	41 mm
No. of teeth Z	4

Shank	DIN 6535 HB to h6
Overall length L	104 mm
Direction of infeed	horizontal, oblique and vertical
Recess Ø D ₁	19.5 mm
Shank Ø D _s	20 mm
Cutting edge Ø D _c	20 mm
Feed f _z for side milling in INOX > 900 N/mm ²	0.08 mm
Overhang length L ₁ incl. recess	52 mm
Feed f _z for slot milling in steel < 900 N/mm ²	0.1 mm
Corner rounding r _v	0.3 mm
Tolerance nominal Ø	e8
Feed f _z for slot milling in stainless steel > 900 N/mm ²	0.07 mm
Feed f _z for side milling in steel < 900 N/mm ²	0.13 mm
Series	GARANT 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	0.3×D for side milling
Cutting width a _e for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Machining strategy	MTC
Colour ring	green
Type of product	End mill