

Garant**GARANT Master Steel SlotMachine solid carbide roughing end mill with through-coolant HPC, TiAlN, Ø d11 DC: 20 mm****Order data**

Order number	205551 20
GTIN	4062406111205
Item class	11X

Description**Version:**

With a new-type knurled profile, optimised for higher feed rates. Improved cutting edge protection thanks to slight edge honing. Tremendous bending strength due to the use of ultra-fine grain substrate.

Feed rate per tooth up to 0.1 mm up to a depth of 2xD (in the slot milled from solid).

With **internal coolant supply** for reliable swarf evacuation.

Advantage:

The tool geometry produces particularly tightly rolled swarf that is discharged via flat chip breaker recesses. As a result, the tool maintains an extremely stable core. Plunge angle of up to 10° possible thanks to generous recess on the front face.

Application:

For roughing machining, particularly suitable for full-slot machining.

Tolerance nominal Ø: d11

No. of teeth Z: 5

Helix angle: 42 degrees

Direction of infeed: horizontal and oblique

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length L_c: 38 mm

Overhang length L₁ incl. recess: 52 mm

Recess Ø D₁: 18.5 mm

Overall length L: 104 mm

Shank Ø D_s: 20 mm

Technical description

Shank Ø D _s	20 mm
Recess Ø D ₁	18.5 mm
Helix angle	42 degrees
Tolerance nominal Ø	d11
Flute length L _c	38 mm
Shank	DIN 6535 HB to h6
Feed f _z for slot milling in steel < 900 N/mm ²	0.09 mm
Overhang length L ₁ incl. recess	52 mm
Feed f _z for side milling in steel < 900 N/mm ²	0.13 mm
Overall length L	104 mm
Cutting edge Ø D _c	20 mm
Corner chamfer width at 45°	1 mm
No. of teeth Z	5
Direction of infeed	horizontal and oblique
Corner chamfer angle	45 degrees
Series	GARANT Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Milling profile	NR
Spacing of the cutters	unequal spacing
Cutting width a _e for milling operation	0.4×D for side milling
Cutting width a _e for milling operation	0.05×D for copy milling
Through-coolant	yes
Machining strategy	HPC
Colour ring	green
Type of product	End mill

Services

Shank clamping flats for shrink-fit chucks, with retainer
function Shank Ø tool 20 mm

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