

# GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 20 mm



#### **Order data**

| Order number | 205548 20     |
|--------------|---------------|
| GTIN         | 4045197853592 |
| 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 ultrafine grain substrate.

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

#### **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, oblique and vertical

Shank: DIN 6535 HB to h6

No. of teeth Z: 5

Flute length L: 26 mm Overall length L: 92 mm Shank Ø D<sub>s</sub>: 20 mm

Corner chamfer width at 45°: 1 mm

Feed  $f_z$  for slot milling in steel < 900 N/mm<sup>2</sup>: 0.12 mm

## **Technical description**

No. of teeth Z 5

| Direction of infeed  | horizontal, oblique and vertical |
|--|----------------------------------|
| Shank Ø D <sub>s</sub>                                       | 20 mm                            |
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.12 mm                          |
| Flute length L <sub>c</sub>                                  | 26 mm                            |
| Overall length L   | 92 mm                            |
| Shank  | DIN 6535 HB to h6                |
| Cutting edge $\emptyset$ $D_{C}$                             | 20 mm                            |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.14 mm                          |
| Tolerance nominal Ø  | d11                              |
| Corner chamfer width at 45°                                  | 1 mm                             |
| Helix angle  | 42 degrees                       |
| Corner chamfer angle   | 45 degrees                       |
| Series   | GARANT Master Steel              |
| Coating  | TiAIN                            |
| Tool material  | Solid carbide                    |
| Standard   | DIN 6527                         |
| Milling profile  | NR                               |
| Spacing of the cutters                                       | unequal spacing                  |
| Cutting width a <sub>e</sub> for milling operation           | 0.5×D for side milling           |
| Cutting width a <sub>e</sub> for milling operation           | Full slot cutting depth 1×D      |
| Through-coolant  | no                               |
| 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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