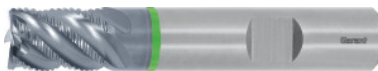


**Garant**
**GARANT Master Steel SlotMachine solid carbide roughing end mill HPC, TiAlN, Ø d11 DC: 16mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 205548 16     |
| GTIN         | 4045197853585 |
| 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 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.

**Technical description**

|                                                              |                   |
|--------------------------------------------------------------|-------------------|
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.1 mm            |
| Shank                                                        | DIN 6535 HB to h6 |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.12 mm           |
| Tolerance nominal Ø                                          | d11               |
| Corner chamfer width at 45°                                  | 0.8 mm            |
| Cutting edge Ø $D_c$                                         | 16 mm             |
| No. of teeth Z                                               | 5                 |
| Overall length L                                             | 82 mm             |

|                                                    |                                  |
|----------------------------------------------------|----------------------------------|
| Shank Ø D <sub>s</sub>                             | 16 mm                            |
| Flute length L <sub>c</sub>                        | 22 mm                            |
| Direction of infeed                                | horizontal, oblique and vertical |
| Helix angle                                        | 42 degrees                       |
| Corner chamfer angle                               | 45 degrees                       |
| Series                                             | Master Steel                     |
| Coating                                            | TiAlN                            |
| 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 / face mill                  |

## User data

|                                | Suitability | V <sub>c</sub> | ISO code |
|--------------------------------|-------------|----------------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 200 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 180 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 160 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 140 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 110 m/min      | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 50 m/min       | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable    | 35 m/min       | M        |
| GG(G)                          | suitable    | 200 m/min      | K        |
| Uni                            | suitable    |                |          |

|             |                                           |
|-------------|-------------------------------------------|
| wet maximum | suitable                                  |
| wet minimum | suitable only under restricted conditions |
| dry         | suitable                                  |
| Air         | suitable                                  |