

## Garant

### GARANT Master Steel SlotMachine solid carbide roughing end mill HPC / TPC, TiAlN, Ø d11 DC: 8mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 205557 8      |
| GTIN         | 4062406377038 |
| 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.

##### 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.

**Problem-solver for TPC machining.**

#### Technical description

|  |                                  |
|--|----------------------------------|
| Tolerance nominal Ø  | d11                              |
| Flute length $L_c$   | 40 mm                            |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.05 mm                          |
| Corner chamfer width at 45°                                  | 0.4 mm                           |
| Cutting edge Ø $D_c$   | 8 mm                             |
| Shank Ø $D_s$  | 8 mm                             |
| Direction of infeed  | horizontal, oblique and vertical |
| Shank  | DIN 6535 HB to h6                |

|   |                                 |
|---|---------------------------------|
| Corner chamfer angle                      | 45 degrees                      |
| Helix angle                               | 42 degrees                      |
| No. of teeth Z                            | 5                               |
| Overall length L                          | 81 mm                           |
| Series                                    | Master Steel                    |
| Coating                                   | TiAlN                           |
| Tool material                             | Solid carbide                   |
| Standard                                  | Manufacturer's standard         |
| Milling profile                           | NR                              |
| Spacing of the cutters                    | unequal spacing                 |
| Cutting width $a_e$ for milling operation | $0.2 \times D$ for side milling |
| Through-coolant                           | no                              |
| Machining strategy                        | TPC                             |
| Machining strategy                        | HPC                             |
| Colour ring                               | green                           |
| Type of product                           | End / face mill                 |

## User data

|                                | Suitability | $V_c$     | ISO code |
|--------------------------------|-------------|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 160 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 150 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 130 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 110 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 80 m/min  | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 40 m/min  | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable    | 25 m/min  | M        |
| GG(G)                          | suitable    | 160 m/min | K        |
| Uni                            | suitable    |           |          |
| wet maximum                    | suitable    |           |          |

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