

## Garant

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



#### Order data

|              |               |
|--------------|---------------|
| Order number | 205555 8      |
| GTIN         | 4062406275631 |
| 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.

##### Application:

For roughing machining.

##### Problem-solver for TPC machining.

#### Technical description

|                                 |                   |
|---------------------------------|-------------------|
| Flute length $L_c$              | 32 mm             |
| No. of teeth $Z$                | 5                 |
| Tolerance nominal $\varnothing$ | d11               |
| Cutting edge $\varnothing D_c$  | 8 mm              |
| Corner chamfer angle            | 45 degrees        |
| Helix angle                     | 42 degrees        |
| Shank $\varnothing D_s$         | 8 mm              |
| Corner chamfer width at 45°     | 0.4 mm            |
| Shank                           | DIN 6535 HB to h6 |

|                                                              |                                  |
|--------------------------------------------------------------|----------------------------------|
| Direction of infeed                                          | horizontal, oblique and vertical |
| Overall length L                                             | 74 mm                            |
| Feed $f_z$ for side milling in steel < 900 N/mm <sup>2</sup> | 0.06 mm                          |
| Feed $f_z$ for slot milling in steel < 900 N/mm <sup>2</sup> | 0.04 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×D for side milling           |
| Through-coolant                                              | no                               |
| Machining strategy                                           | HPC                              |
| Machining strategy                                           | TPC                              |
| Colour ring                                                  | green                            |
| Type of product                                              | End / face mill                  |

## User data

|                                | Suitability | $V_c$     | ISO code |
|--------------------------------|-------------|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 180 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 170 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 150 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 130 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 100 m/min | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 45 m/min  | M        |
| INOX > 900 N/mm <sup>2</sup>   | suitable    | 30 m/min  | M        |
| GG(G)                          | suitable    | 180 m/min | K        |
| Uni                            | suitable    |           |          |
| wet maximum                    | suitable    |           |          |

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