

## Garant

### GARANT Master Ni-Based solid carbide milling cutter HPC/TPC, TiAlN, Ø e8 DC: 4mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 203161 4      |
| GTIN         | 4062406565770 |
| Item class   | 11Z           |

#### Description

##### Version:

Specially ground with **Torus-like corner radius**.

Innovative substrate specially for machining **nickel-based alloys**. Newly developed coating.

##### Application:

For milling **nickel-based alloys with high red hardness**.

##### Note:

**Successor product to No. 203082.**

#### Technical description

|   |                                  |
|---|----------------------------------|
| Helix angle                                 | 38 degrees                       |
| Direction of infeed                         | horizontal, oblique and vertical |
| Cutting edge Ø D <sub>c</sub>               | 4 mm                             |
| Overall length L                            | 57 mm                            |
| Overhang length L <sub>1</sub> incl. recess | 17 mm                            |
| Corner rounding r <sub>v</sub>              | 0.2 mm                           |
| Shank Ø D <sub>s</sub>                      | 6 mm                             |
| Tolerance nominal Ø                         | e8                               |
| Recess Ø D <sub>1</sub>                     | 3.8 mm                           |
| Shank                                       | DIN 6535 HB to h6                |

|   |                        |
|---|------------------------|
| Feed $f_z$ for side milling in Inconel®   | 0.035 mm               |
| Balance quality with shank                | G 2.5 with HB          |
| No. of teeth Z                            | 5                      |
| Flute length $L_c$                        | 11 mm                  |
| Series                                    | Master Ni-based        |
| Coating                                   | TiAlN                  |
| Tool material                             | Solid carbide          |
| Standard                                  | DIN 6527               |
| Type                                      | N                      |
| Helix angle characteristic                | unequal spacing        |
| Spacing of the cutters                    | unequal spacing        |
| Cutting width $a_e$ for milling operation | 0.3×D for side milling |
| Cutting width $a_e$ for milling operation | 0,08×D                 |
| Through-coolant                           | no                     |
| Machining strategy                        | HPC                    |
| Machining strategy                        | HPC                    |
| Colour ring                               | pink                   |
| Type of product                           | End / face mill        |

## User data

|             | Suitability | $V_c$    | ISO code |
|-------------|-------------|----------|----------|
| Inconel     | suitable    | 40 m/min | S        |
| wet maximum | suitable    |          |          |