

**Garant**
**GARANT Master INOX solid carbide milling cutter HPC / TPC, TiAlN, Ø h10 DC: 5mm**

**Order data**

|              |               |
|--------------|---------------|
| Order number | 203011 5      |
| GTIN         | 4045197851840 |
| Item class   | 11X           |

**Description**
**Version:**

For **roughing and finishing**.

HPC milling cutter with **newly developed high-performance coating** for **outstanding tool life** and **optimum metal removal rate** in a very wide range of stainless steels. **Greater oxidation resistance** and **high-temperature hardness**.

Can be used at **high cutting speeds**, particularly suitable even for TOOLOX®.

**Advantage:**

Particularly low vibration running.

**Technical description**

|   |                                  |
|---|----------------------------------|
| Shank   | DIN 6535 HB to h6                |
| Overhang length $L_1$ incl. recess                                    | 25 mm                            |
| Direction of infeed   | horizontal, oblique and vertical |
| Feed $f_z$ for slot milling in stainless steel $> 900 \text{ N/mm}^2$ | 0.025 mm                         |
| No. of teeth $Z$  | 4                                |
| Tolerance nominal $\varnothing$                                       | h10                              |
| Cutting edge $\varnothing D_c$  | 5 mm                             |
| Feed $f_z$ for side milling in INOX $> 900 \text{ N/mm}^2$            | 0.025 mm                         |
| Flute length $L_c$  | 18 mm                            |
| Recess $\varnothing D_1$  | 4.8 mm                           |

|   |                             |
|---|-----------------------------|
| Shank $\varnothing D_s$                   | 6 mm                        |
| Corner chamfer width at 45°               | 0.25 mm                     |
| Overall length L                          | 62 mm                       |
| Helix angle                               | 40 degrees                  |
| Corner chamfer angle                      | 45 degrees                  |
| Series                                    | Master INOX                 |
| Coating                                   | TiAlN                       |
| Tool material                             | Solid carbide               |
| Standard                                  | Manufacturer's standard     |
| Type                                      | N                           |
| Helix angle characteristic                | unequal spacing             |
| Spacing of the cutters                    | unequal spacing             |
| Cutting width $a_e$ for milling operation | 0.08xD                      |
| Cutting width $a_e$ for milling operation | Full slot cutting depth 1xD |
| Through-coolant                           | no                          |
| Machining strategy                        | HPC                         |
| Machining strategy                        | TPC                         |
| Colour ring                               | blue                        |
| Type of product                           | End / face mill             |

## User data

|                                | Suitability | $V_c$     | ISO code |
|--------------------------------|-------------|-----------|----------|
| Steel < 500 N/mm <sup>2</sup>  | suitable    | 240 m/min | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable    | 220 m/min | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable    | 180 m/min | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable    | 180 m/min | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable    | 115 m/min | P        |
| Steel < 50 HRC                 | suitable    | 80 m/min  | H        |
| INOX < 900 N/mm <sup>2</sup>   | suitable    | 100 m/min | M        |

|                              |   |          |   |
|------------------------------|---|----------|---|
| INOX > 900 N/mm <sup>2</sup> | suitable                                  | 85 m/min | M |
| wet maximum                  | suitable                                  |          |   |
| wet minimum                  | suitable                                  |          |   |
| dry                          | Suitable only under restricted conditions |          |   |
| Air                          | suitable                                  |          |   |