## ⚡ Hoffmann Group

## Garant

# GARANT Master INOX solid carbide milling cutter HPC / TPC, TiAlN, Ø h10 DC: 10mm

## Order data

| Order number | 203011 10 |
|---|---|
| GTIN | 4045197851871 |
| 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 |
|---|---|
| Cutting edge Ø $D_c$ | 10 mm |
| Recess Ø $D_1$ | 9.5 mm |
| Feed $f_z$ for side milling in INOX > 900 N/mm$^2$ | 0.045 mm |
| Overhang length $L_1$ incl. recess | 40 mm |
| Corner chamfer width at 45° | 0.25 mm |
| No. of teeth Z | 4 |
| Flute length $L_c$ | 30 mm |
| Overall length L | 80 mm |
| Tolerance nominal Ø | h10 |

| | |
|---|---|
| Feed $f_z$ for slot milling in stainless steel > 900 N/mm$^2$ | 0.04 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Shank Ø $D_s$ | 10 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 | 0.08×D |
| Cutting width $a_e$ for milling operation | Full slot cutting depth 1×D |
| 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$^2$ | suitable | 240 m/min | P |
| Steel < 750 N/mm$^2$ | suitable | 220 m/min | P |
| Steel < 900 N/mm$^2$ | suitable | 180 m/min | P |
| Steel < 1100 N/mm$^2$ | suitable | 180 m/min | P |
| Steel < 1400 N/mm$^2$ | suitable | 115 m/min | P |
| Steel < 50 HRC | suitable | 80 m/min | H |
| INOX < 900 N/mm$^2$ | suitable | 100 m/min | M |

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