

# GARANT Master Titan HSS-PM roughing end mill HPC, TiAlN, $\varnothing$ k10 DC / R1: 25/2,0mm



#### **Order data**

| Order number | 192945 25/2,0 |  |  |
|--------------|---------------|--|--|
| GTIN         | 4062406300432 |  |  |
| Item class   | 11Z           |  |  |

### **Description**

#### **Version:**

Innovative knurled profile and optimised flute geometry for a evacuating a high volume of chips at very high process reliability. Increased tool life due to precise alignment of the throughcoolant with the cutting edges.

#### **Advantage:**

New type of tool material; problem solver under unstable machining conditions.

## **Technical description**

| Cutting edge $\emptyset$ $D_c$                                  | 25 mm                     |  |  |
|---|---------------------------|--|--|
| Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup>     | 0.04 mm                   |  |  |
| Helix angle   | 40 degrees                |  |  |
| Recess Ø D <sub>1</sub>   | 24 mm                     |  |  |
| Tolerance nominal Ø   | k10                       |  |  |
| Overhang length L <sub>1</sub> incl. recess                     | 108 mm                    |  |  |
| Overall length L  | 166 mm                    |  |  |
| Feed $f_z$ for side milling in titanium > 850 N/mm <sup>2</sup> | N/mm <sup>2</sup> 0.04 mm |  |  |
| No. of teeth Z  | 5                         |  |  |
| Flute length L <sub>c</sub>                                     | 90 mm                     |  |  |
| Shank   | DIN 6535 HB to h6         |  |  |



| Direction of infeed                                | horizontal, oblique and vertical |  |  |
|--|----------------------------------|--|--|
| Shank Ø D <sub>s</sub>                             | 25 mm                            |  |  |
| Corner radius R <sub>1</sub>                       | 2 mm                             |  |  |
| Series   | Master Titan                     |  |  |
| Coating  | TiAIN                            |  |  |
| Tool material                                      | HSS PM                           |  |  |
| Standard   | DIN 844                          |  |  |
| Milling profile                                    | HR                               |  |  |
| Helix angle characteristic                         | unequal spacing                  |  |  |
| Spacing of the cutters                             | unequal spacing                  |  |  |
| Cutting width a <sub>e</sub> for milling operation | 0.3×D for side milling           |  |  |
| Through-coolant                                    | no                               |  |  |
| Machining strategy                                 | HPC                              |  |  |
| Colour ring  | pink                             |  |  |
| Type of product                                    | End / face mill                  |  |  |

## User data

|                              | Suitability | <b>V</b> <sub>c</sub> | ISO code |
|------------------------------|-------------|-----------------------|----------|
| INOX < 900 N/mm <sup>2</sup> | suitable    | 30 m/min              | Μ        |
| INOX > 900 N/mm <sup>2</sup> | suitable    | 28 m/min              | М        |
| Ti > 850 N/mm <sup>2</sup>   | suitable    | 28 m/min              | S        |
| wet maximum                  | suitable    |                       |          |