

## Garant

### GARANT Master INOX solid carbide torus cutter HPC DIN 6535 HA, TiAlN, Ø DC / R1: 12/1,5mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 206345 12/1,5 |
| GTIN         | 4045197852151 |
| Item class   | 11X           |

#### Description

##### Version:

Dimensions similar to DIN 6527.

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.

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

##### Advantage:

**Greater oxidation resistance and high-temperature hardness.**

#### Technical description

|   |                   |
|---|-------------------|
| Feed $f_z$ for side milling in INOX > 900 N/mm <sup>2</sup> | 0.062 mm          |
| Shank   | DIN 6535 HA to h6 |
| Flute length $L_c$  | 26 mm             |
| No. of teeth Z  | 4                 |
| Cutting edge Ø $D_c$  | 12 mm             |
| Overall length L  | 83 mm             |
| Shank Ø $D_s$   | 12 mm             |
| Recess Ø $D_1$  | 11.5 mm           |
| Corner radius $R_1$   | 1.5 mm            |
| Overhang length $L_1$ incl. recess                          | 38 mm             |

|   |                                  |
|---|----------------------------------|
| Helix angle   | 40 degrees                       |
| Feed $f_z$ for slot milling in stainless steel $> 900 \text{ N/mm}^2$ | 0.05 mm                          |
| Series  | Master INOX                      |
| Coating   | TiAlN                            |
| Tool material   | Solid carbide                    |
| Standard  | Manufacturer's standard          |
| Type  | N                                |
| Tolerance nominal $\varnothing$                                       | h10                              |
| Helix angle characteristic  | unequal spacing                  |
| Spacing of the cutters  | unequal spacing                  |
| Direction of infeed   | horizontal, oblique and vertical |
| Cutting width $a_e$ for milling operation                             | $0.3 \times D$ for side milling  |
| Cutting width $a_e$ for milling operation                             | $0.05 \times D$ for side milling |
| Through-coolant   | no                               |
| Machining strategy  | HPC                              |
| Shank tolerance   | h6                               |
| Colour ring   | blue                             |
| Type of product   | Torus cutter                     |

## User data

|                               | Suitability | $V_c$     | ISO code |
|-------------------------------|-------------|-----------|----------|
| Steel $< 500 \text{ N/mm}^2$  | suitable    | 250 m/min | P        |
| Steel $< 750 \text{ N/mm}^2$  | suitable    | 230 m/min | P        |
| Steel $< 900 \text{ N/mm}^2$  | suitable    | 200 m/min | P        |
| Steel $< 1100 \text{ N/mm}^2$ | suitable    | 180 m/min | P        |
| Steel $< 1400 \text{ N/mm}^2$ | suitable    | 170 m/min | P        |
| TOOLOX 33                     | suitable    | 115 m/min | H        |
| TOOLOX 44                     | suitable    | 80 m/min  | H        |
| INOX $< 900 \text{ N/mm}^2$   | suitable    | 110 m/min | M        |

|                              |   |           |   |
|------------------------------|---|-----------|---|
| INOX > 900 N/mm <sup>2</sup> | suitable                                  | 90 m/min  | M |
| Uni                          | suitable only under restricted conditions |           |   |
| wet maximum                  | suitable                                  |           |   |
| wet minimum                  | suitable                                  |           |   |
| dry                          | Suitable only under restricted conditions |           |   |
| Air                          | suitable                                  |           |   |
| <b>Services</b>              |   |           |   |
| Shank grinding Type HB       |   | 129100 HB |   |