

**Garant****GARANT Diabolo solid carbide torus cutter HRC 62 HPC, TiSiN, Ø e8 DC / R1: 6/0,5mm****Order data**

|              |               |
|--------------|---------------|
| Order number | 206421 6/0,5  |
| GTIN         | 4069515030595 |
| Item class   | 11Z           |

**Description****Version:****GARANT Diabolo:**

Special geometry, coating and carbide for hard machining.

Tolerance: Corner radius  $R_1 = \pm 0.005 \text{ mm}$ .

**Specialist for steels up to 62 HRC.** Reliable process and longer service life thanks to optimised cutter geometry and state-of-the-art high-performance coating.

Without dynamic helical pitch.

**Technical description**

|                                               |                   |
|-----------------------------------------------|-------------------|
| Helix angle                                   | 50 degrees        |
| Overhang length $L_1$ incl. recess            | 21 mm             |
| Flute length $L_c$                            | 7 mm              |
| Corner radius $R_1$                           | 0.5 mm            |
| Feed $f_z$ for copy milling in steel < 65 HRC | 0.048 mm          |
| No. of teeth Z                                | 6                 |
| Overall length L                              | 57 mm             |
| Recess Ø $D_1$                                | 5.5 mm            |
| Shank                                         | DIN 6535 HA to h6 |
| Cutting edge Ø $D_c$                          | 6 mm              |

## Data sheet

|                                                        |                                  |
|--------------------------------------------------------|----------------------------------|
| Shank Ø D <sub>s</sub>                                 | 6 mm                             |
| Feed f <sub>z</sub> for copy milling in steel < 60 HRC | 0.05 mm                          |
| Feed f <sub>z</sub> for side milling in steel < 60 HRC | 0.035 mm                         |
| Series                                                 | Diabolo                          |
| Coating                                                | TiSiN                            |
| Tool material                                          | Solid carbide                    |
| Standard                                               | Manufacturer's standard          |
| Type                                                   | H                                |
| Tolerance nominal Ø                                    | h7                               |
| Direction of infeed                                    | horizontal, oblique and vertical |
| Cutting width a <sub>e</sub> for milling operation     | 0.05×D for side milling          |
| Cutting width a <sub>e</sub> for milling operation     | 0.05×D for copy milling          |
| Through-coolant                                        | no                               |
| Machining strategy                                     | HPC                              |
| Shank tolerance                                        | h6                               |
| Colour ring                                            | red                              |
| Type of product                                        | Torus cutter                     |

## User data

|                                | Suitability                               | V <sub>c</sub> | ISO code |
|--------------------------------|-------------------------------------------|----------------|----------|
| Steel < 1400 N/mm <sup>2</sup> | suitable only under restricted conditions | 170 m/min      | P        |
| Steel < 50 HRC                 | suitable only under restricted conditions | 150 m/min      | H        |
| Steel < 55 HRC                 | suitable                                  | 130 m/min      | H        |
| Steel < 60 HRC                 | suitable                                  | 100 m/min      | H        |
| Steel < 65 HRC                 | suitable                                  | 80 m/min       | H        |
| Steel < 67 HRC                 | suitable only under restricted conditions | 65 m/min       | H        |

|                          |                                              |
|--------------------------|----------------------------------------------|
| wet minimum              | suitable only under<br>restricted conditions |
| dry                      | suitable                                     |
| Air                      | suitable                                     |
| <b>Suitable products</b> |                                              |

<https://www.hoffmann-group.com/GB/en/hom/p/206421-6/0,5>