

Garant

Solid carbide torus cutter HPC, TiAlN, Ø DC / R1: 2/0,5mm



Order data

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|--------------|---------------|
| Order number | 206323 2/0,5 |
| GTIN | 4045197640826 |
| Item class | 11X |

Description

Version:

GARANT Diabolo 70:

Special solid carbide substrate with extremely high tensile strength combined with **outstanding wear resistance** for optimum process reliability.

Newly developed **nano-crystalline high-tech coating for hard milling up to 70 HRC**. Very suitable for **continuous use** in tool and mould making.

Sizes 2 – 5: **Recess angle $\alpha = 15^\circ$** .

Tolerances:

- **Corner radius: $R_1 = \pm 0.01$ mm.**

Application:

Due to the **special hard geometry** ideal for use on hardened materials from 60 HRC to 70 HRC.

Technical description

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|---|----------|
| Corner radius R_1 | 0.5 mm |
| No. of teeth Z | 4 |
| Overhang length L_1 incl. recess | 10 mm |
| Feed f_z for side milling in steel < 70 HRC | 0.005 mm |
| Feed f_z for copy milling in steel < 70 HRC | 0.005 mm |
| Cutting edge $\varnothing D_c$ | 2 mm |
| Recess $\varnothing D_1$ | 1.9 mm |
| Shank $\varnothing D_s$ | 6 mm |
| Flute length L_c | 2 mm |

| | |
|---|----------------------------------|
| Overall length L | 58 mm |
| Shank | DIN 6535 HA to h6 |
| Helix angle | 30 degrees |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | H |
| Tolerance nominal \varnothing | 0 / -0.02 |
| Direction of infeed | horizontal, oblique and vertical |
| Cutting width a_e for milling operation | 0.05×D for copy milling |
| Cutting width a_e for milling operation | 0.05×D for side milling |
| Through-coolant | no |
| Machining strategy | HPC |
| Shank tolerance | h6 |
| Colour ring | red |
| Type of product | Torus cutter |

User data

| | Suitability | V_c | ISO code |
|----------------|---|-----------|----------|
| Steel < 60 HRC | suitable only under restricted conditions | 150 m/min | H |
| Steel < 65 HRC | suitable | 110 m/min | H |
| Steel < 67 HRC | suitable | 90 m/min | H |
| Steel < 70 HRC | suitable | 80 m/min | H |
| dry | suitable | | |
| Air | suitable | | |

Services

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|------------------------|-----------|
| Shank grinding Type HB | 129100 HB |
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