

Garant
Solid carbide milling cutter HPC, TiAlN, Ø DC: 20 mm

Order data

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|--------------|---------------|
| Order number | 203212 20 |
| GTIN | 4045197641045 |
| 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 $\alpha = 15^\circ$** .

Tolerance:

- **Size nominal Ø: $D_c \leq$ size 12: 0 / -0.02 mm;**
- **Size nominal Ø: D_c from size 16: 0 / -0.03 mm.**

Application:

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

For profile milling as finishing.

(Plunge cutting only to shallow depths.)

Note:

For materials > 65 HRC: $a_e = 0.02 \times D$.

Machining strategy: HPC

Tolerance nominal Ø: 0 / -0.03

No. of teeth Z: 6

Helix angle: 45 degrees

Direction of infeed: horizontal and oblique

Shank: DIN 6535 HA to h6

No. of teeth Z: 6

Flute length L_c : 38 mm

Overall length L: 105 mm

Shank Ø D_s : 20 mm

Feed f_z for side milling in steel < 70 HRC: 0.045 mm

Technical description

| | |
|---|-------------------------|
| No. of teeth Z | 6 |
| Feed f_z for side milling in steel < 70 HRC | 0.045 mm |
| Cutting edge $\varnothing D_c$ | 20 mm |
| Shank $\varnothing D_s$ | 20 mm |
| Overall length L | 105 mm |
| Flute length L_c | 38 mm |
| Direction of infeed | horizontal and oblique |
| Shank | DIN 6535 HA to h6 |
| Tolerance nominal \varnothing | 0 / -0.03 |
| Helix angle | 45 degrees |
| Corner chamfer angle | 90 degrees |
| Series | Diabolo |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | H |
| Cutting width a_e for milling operation | 0.05×D for side milling |
| Through-coolant | no |
| Machining strategy | HPC |
| Colour ring | red |
| Type of product | End mill |

Services

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|---|-------------|
| Shank recess Type FRST | 209900 FRST |
| Shank clamping flats for shrink-fit chucks, with retainer function Shank \varnothing tool 20 mm | SZ2025 20 |
| Shank grinding Type HB | 129100 HB |

