

Garant

Solid carbide milling cutter HPC, TiAlN, Ø DC: 6mm



Order data

| | |
|--------------|---------------|
| Order number | 203212 6 |
| GTIN | 4045197640796 |
| 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 $\varnothing: D_c \leq$ size 12: 0 / -0.02 mm;**
- **Size nominal $\varnothing: D_c$ 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: $a_e = 0.02 \times D$.

Technical description

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|---|---------|
| No. of teeth Z | 6 |
| Feed f_z for side milling in steel < 70 HRC | 0.02 mm |
| Cutting edge $\varnothing D_c$ | 6 mm |
| Shank $\varnothing D_s$ | 6 mm |
| Overall length L | 58 mm |

| | |
|---|-------------------------|
| Flute length L_c | 13 mm |
| Direction of infeed | horizontal and oblique |
| Shank | DIN 6535 HA to h6 |
| Tolerance nominal \varnothing | 0 / -0.02 |
| Helix angle | 45 degrees |
| Corner chamfer angle | 90 degrees |
| 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 / face mill |

User data

| | Suitability | V_c | ISO code |
|----------------|---|-----------|----------|
| Steel < 60 HRC | suitable only under restricted conditions | 145 m/min | H |
| Steel < 65 HRC | suitable | 100 m/min | H |
| Steel < 67 HRC | suitable | 80 m/min | H |
| Steel < 70 HRC | suitable | 75 m/min | H |
| wet minimum | suitable only under restricted conditions | | |
| dry | suitable | | |
| Air | suitable | | |

Services

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