

Garant

Solid carbide slot drill HPC, TiAlN, Ø DC: 4mm



Order data

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|--------------|---------------|
| Order number | 201648 4 |
| GTIN | 4045197641472 |
| 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 0.5 – 5: **Recess angle $\alpha = 15^\circ$** .

Application:

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

Note:

f_z for $a_p = 0.05 \times D$.

Technical description

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|---|----------------------------------|
| Cutting edge Ø D _c | 4 mm |
| No. of teeth Z | 2 |
| Feed f_z for side milling in steel < 70 HRC | 0.01 mm |
| Feed f_z for slot milling in steel < 70 HRC | 0.008 mm |
| Shank Ø D _s | 6 mm |
| Overall length L | 50 mm |
| Flute length L _c | 10 mm |
| Direction of infeed | horizontal, oblique and vertical |
| Shank | DIN 6535 HA to h6 |

| | |
|---|-----------------------------|
| Tolerance nominal \varnothing | 0 / -0.02 |
| Helix angle | 35 degrees |
| Corner chamfer angle | 90 degrees |
| Coating | TiAlN |
| Tool material | Solid carbide |
| Standard | Manufacturer's standard |
| Type | H |
| Helix angle characteristic | unequal spacing |
| Cutting width a_e for milling operation | 0.05×D for side milling |
| Cutting width a_e for milling operation | Full slot cutting depth 1×D |
| 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 | 60 m/min | H |
| Steel < 65 HRC | suitable | 50 m/min | H |
| Steel < 67 HRC | suitable | 40 m/min | H |
| Steel < 70 HRC | suitable | 35 m/min | H |
| wet minimum | suitable only under restricted conditions | | |
| dry | suitable | | |
| Air | suitable | | |

Services

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