# Garant

# Solid carbide milling cutter HPC, TiAIN, Ø DC: 16 mm



# Order data

Order number	203212 16
GTIN	4045197641038
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  $\emptyset$ : D<sub>c</sub>  $\leq$  size 12: 0 / -0.02 mm;

• Size nominal  $\emptyset$ : D<sub>c</sub> 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  $\emptyset$ : 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<sub>c</sub>: 32 mm Overall length L: 93 mm Shank  $\emptyset$  D<sub>s</sub>: 16 mm Feed f<sub>z</sub> for side milling in steel < 70 HRC: 0.04 mm

# **Technical description**

Data sheet

No. of teeth Z	6
Feed $f_z$ for side milling in steel < 70 HRC	0.04 mm
Cutting edge $Ø D_c$	16 mm
Shank Ø D <sub>s</sub>	16 mm
Overall length L	93 mm
Flute length $L_c$	32 mm
Direction of infeed	horizontal and oblique
Shank	DIN 6535 HA to h6
Tolerance nominal Ø	0 / -0.03
Helix angle	45 degrees
Corner chamfer angle	90 degrees
Series	Diabolo
Coating	TiAIN
Tool material	Solid carbide
Standard	Manufacturer's standard
Туре	Н
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

Shank recess Type FRST	209900 FRST
Shank clamping flats for shrink-fit chucks, with retainer function Shank Ø tool 16 mm	SZ2025 16
Shank grinding Type HB	129100 HB