# Garant

### Solid carbide milling cutter HPC, TiAIN, Ø DC: 2mm



# Order data

Order number	203212 2
GTIN	4045197640758
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 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:  $a_e = 0.02 \times D$ .

## **Technical description**

Feed $f_z$ for side milling in steel < 70 HRC	0.018 mm
Cutting edge $Ø D_c$	2 mm
No. of teeth Z	4
Shank Ø D <sub>s</sub>	6 mm
Overall length L	58 mm

Flute length L <sub>c</sub>	6 mm	
Direction of infeed	horizontal and oblique	
Shank	DIN 6535 HA to h6	
Tolerance nominal Ø	0 / -0.02	
Helix angle	45 degrees	
Corner chamfer angle	90 degrees	
Coating	TiAlN	
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 / face mill	

# User data

	Suitability	V <sub>c</sub>	ISO code
Steel < 60 HRC	suitable only under restricted conditions	145 m/min	Н
Steel < 65 HRC	suitable	100 m/min	Н
Steel < 67 HRC	suitable	80 m/min	Н
Steel < 70 HRC	suitable	75 m/min	Н
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

# Services

Shank	grinding	Type HB
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129100 HB

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