

**Garant**
**GARANT Diabolo solid carbide end torus cutter HPC, TiAlN, Ø h9 DC: 4mm**

**Order data**

Order number	206275 4
GTIN	4045197860859
Item class	11X

**Description**
**Version:**
**GARANT Diabolo:**

Special geometry, coating and carbide for hard machining.

Tolerance: Corner radius  $R_1 = \pm 0.01 \text{ mm}$ .

Special centre cutting edge geometry for traverse milling at very high feed rates.

**Application:**

**For copy and traverse milling** in hard machining **under HPC / HSC conditions**. Special milling strategies allow **very high metal removal rates**.

**Note:**

**Successor product to No. 206278.**

**Tools can be reground.**

**Technical description**

Feed $f_z$ in steel < 60 HRC	0.049 mm
Overhang length $L_1$ incl. recess	24 mm
No. of teeth $Z$	2
Cutting edge $\varnothing D_c$	4 mm
Flute length $L_c$	2.5 mm
Dimension $a_{p \max}$ transverse	0.15 mm
Overall length $L$	85 mm
Recess $\varnothing D_1$	3.6 mm
Shank $\varnothing D_s$	6 mm

Programming radius	0.5 mm
Setting angle $\kappa$	11 degrees
Series	Diabolo
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	h9
Helix angle	12 degrees
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	Full slot cutting depth $1 \times D$
Shank	DIN 6535 HA to h5
Through-coolant	no
Machining strategy	HPC
Colour ring	red
Type of product	End torus mill

## User data

	Suitability	$V_c$	ISO code
Steel < 1400 N/mm <sup>2</sup>	suitable	160 m/min	P
Steel < 50 HRC	suitable	145 m/min	H
Steel < 55 HRC	suitable	130 m/min	H
Steel < 60 HRC	suitable	95 m/min	H
Steel < 65 HRC	suitable	70 m/min	H
wet maximum	suitable only under restricted conditions		
wet minimum	suitable only under restricted conditions		
dry	suitable		

Air  
**Services**

suitable

Shank grinding Type HB

129100 HB