

Garant
GARANT Diabolo solid carbide end torus cutter HPC, TiAlN, Ø h9 DC: 12mm

Order data

Order number	206273 12
GTIN	4045197860828
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. 206276.

Tools can be reground.

Technical description

Overhang length L_1 incl. recess	30 mm
Dimension $a_{p \text{ max}}$ transverse	0.4 mm
Recess $\varnothing D_1$	11 mm
Cutting edge $\varnothing D_c$	12 mm
Programming radius	2 mm
Feed f_z in steel < 60 HRC	0.178 mm
Shank $\varnothing D_s$	12 mm
Flute length L_c	6.8 mm
Overall length L	93 mm

No. of teeth Z	4
Setting angle κ	6 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 ²	suitable	190 m/min	P
Steel < 50 HRC	suitable	170 m/min	H
Steel < 55 HRC	suitable	150 m/min	H
Steel < 60 HRC	suitable	110 m/min	H
Steel < 65 HRC	suitable	80 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