

**Garant**
**Solid carbide end torus cutter HPC, TiAlN, Ø h9 DC: 4mm**

**Order data**

Order number	206262 4
GTIN	4062406279509
Item class	11X

**Description**
**Version:**

Special centre cutting edge geometry for traverse milling at very high feed rates.  
Tolerance: Corner radius  $R_1 = \pm 0.01$  mm.

**Application:**

**For copy and traverse milling** over the full range of hard machining **under HPC/HSC conditions.**

Using special milling strategies **very high rates of metal removal can be achieved.**

**Note:**

**Tools can be reground.**

With conically increasing recess to guarantee stability at long overhangs.

**Technical description**

No. of teeth Z	3
Dimension $a_{p\ max}$ transverse	0.25 mm
Flute length $L_c$	2.5 mm
Shank $\varnothing D_s$	6 mm
Programming radius	0.5 mm
Overhang length $L_1$ incl. recess	16 mm
Feed $f_z$ in steel $< 900$ N/mm <sup>2</sup>	0.07 mm
Setting angle $\kappa$	10.5 degrees
Overall length L	58 mm

Cutting edge $\varnothing D_c$	4 mm
minimum shank recess dia. $D_5$	3.6 mm
maximum shank recess dia. $D_6$	3.95 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	h9
Helix angle	15 degrees
Direction of infeed	horizontal and oblique
Cutting width $a_e$ for milling operation	0.5×D for side milling
Shank	DIN 6535 HA to h5
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End torus mill

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	175 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	155 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	140 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	130 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	100 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	95 m/min	M
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		

dry	suitable only under restricted conditions
Air <b>Services</b>	suitable only under restricted conditions
Shank grinding Type HB	129100 HB