

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

**Order data**

Order number	206288 4
GTIN	4045197989505
Item class	11Z

**Description**
**Version:**

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** of titanium under HPC conditions.

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

**Note:**

Regrinding not recommended.

**Technical description**

Flute length $L_c$	2.5 mm
Recess $\varnothing D_1$	3.6 mm
No. of teeth $Z$	2
Overall length $L$	85 mm
Overhang length $L_1$ incl. recess	24 mm
Shank $\varnothing D_s$	6 mm
Cutting edge $\varnothing D_c$	4 mm
Programming radius	0.5 mm
Dimension $a_{p \max}$ transverse	0.25 mm
Setting angle $\kappa$	10.5 degrees

Feed f in titanium > 850 N/mm <sup>2</sup>	0.05 mm
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal Ø	h9
Helix angle	15 degrees
Direction of infeed	horizontal, oblique and vertical
Cutting width a <sub>e</sub> for milling operation	Full slot cutting depth 1×D
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	HPC
Colour ring	pink
Type of product	End torus mill

### User data

	Suitability	V <sub>c</sub>	ISO code
Ti > 850 N/mm <sup>2</sup>	suitable	80 m/min	S
wet maximum	suitable		

### Services

Shank grinding Type HB	129100 HB
------------------------	-----------