

**Garant**
**GARANT Master Steel solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1: 6/1,0mm**

**Order data**

Order number	206335 6/1,0
GTIN	4062406276775
Item class	11X

**Description**
**Version:**

HPC milling cutter with **newly developed high-performance coating**. For **outstanding tool life** and **optimum metal removal rates** in a range of materials.

With **double relief ground side clearance angle**.

Tolerance: Corner radius  $R_1$

Radius size 0.1 mm – 1 mm:  $R_1 = \pm 0.003$  mm.

Radius size > 1.0 mm:  $R_1 = \pm 0.005$  mm.

**Application:**

Especially for **high speed machining** in **mould and tool making** for **copy milling**. Excellent results for **dry milling**.

**Note:**

**Successor product to No. 206300.**

**Technical description**

Corner radius $R_1$	1 mm
Overall length L	83 mm
Feed $f_z$ for copy milling in steel < 1100 N/mm <sup>2</sup>	0.025 mm
Helix angle	30 degrees
Overhang length $L_1$ incl. recess	44 mm
Shank Ø $D_s$	6 mm
Cutting edge Ø $D_c$	6 mm

Shank	DIN 6535 HA to h6
Feed $f_z$ for side milling in steel $< 1100 \text{ N/mm}^2$	0.022 mm
Flute length $L_c$	7 mm
No. of teeth $Z$	5
minimum shank recess dia. $D_5$	5.5 mm
maximum shank recess dia. $D_6$	5.9 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal $\varnothing$	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	$0.05 \times D$ for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth $0,2 \times D$
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Steel $< 500 \text{ N/mm}^2$	suitable only under restricted conditions	180 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	150 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	110 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	75 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	65 m/min	P
Steel $< 55 \text{ HRC}$	suitable	35 m/min	H

INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	80 m/min	M
GG(G)	suitable	100 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		
<b>Services</b>			

Shank grinding Type HB

129100 HB