

## Garant

### GARANT Master Steel solid carbide torus cutter HPC, TiAlN, Ø e8 DC / R1: 8/1,5mm



#### Order data

Order number	206333 8/1,5
GTIN	4062406276324
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. 206280.**

#### Technical description

Feed $f_z$ for copy milling in steel < 1100 N/mm <sup>2</sup>	0.03 mm
Overhang length $L_1$ incl. recess	27 mm
No. of teeth Z	5
Helix angle	30 degrees
Corner radius $R_1$	1.5 mm
Overall length L	63 mm
Shank $\varnothing D_s$	8 mm

Shank	DIN 6535 HA to h6
Cutting edge $\varnothing D_c$	8 mm
Flute length $L_c$	9 mm
Feed $f_z$ for side milling in steel $< 1100 \text{ N/mm}^2$	0.027 mm
maximum shank recess dia. $D_6$	7.9 mm
minimum shank recess dia. $D_5$	7.4 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	$0.03 \times D$ for copy milling
Cutting width $a_e$ for milling operation	$0.2 \times D$ for side milling
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	200 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	170 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	120 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	85 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	70 m/min	P
Steel $< 55 \text{ HRC}$	suitable	40 m/min	H

INOX < 900 N/mm <sup>2</sup>	suitable	95 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	85 m/min	M
GG(G)	suitable	110 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