

**Garant**
**GARANT Master INOX solid carbide torus cutter HPC DIN 6535 HA, TiAlN, Ø DC / R1: 12/2,0mm**

**Order data**

Order number	206345 12/2,0
GTIN	4045197852168
Item class	11X

**Description**
**Version:**

Dimensions similar to DIN 6527.

HPC milling cutter with **newly developed high-performance coating**.

For **outstanding tool life** and **optimum metal removal rate** in a very wide range of stainless steels.

Can be used at **high cutting speeds**, particularly suitable even for TOOLOX®.

**Advantage:**

**Greater oxidation resistance and high-temperature hardness.**

**Technical description**

Recess Ø D <sub>1</sub>	11.5 mm
Shank Ø D <sub>s</sub>	12 mm
Overall length L	83 mm
Flute length L <sub>c</sub>	26 mm
Shank	DIN 6535 HA to h6
Overhang length L <sub>1</sub> incl. recess	38 mm
No. of teeth Z	4
Cutting edge Ø D <sub>c</sub>	12 mm
Corner radius R <sub>1</sub>	2 mm
Feed f <sub>z</sub> for side milling in INOX > 900 N/mm <sup>2</sup>	0.062 mm

Helix angle	40 degrees
Feed $f_z$ for slot milling in stainless steel $> 900 \text{ N/mm}^2$	0.05 mm
Series	Master INOX
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	h10
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	$0.3 \times D$ for side milling
Cutting width $a_e$ for milling operation	$0.05 \times D$ for side milling
Through-coolant	no
Machining strategy	HPC
Shank tolerance	h6
Colour ring	blue
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Steel $< 500 \text{ N/mm}^2$	suitable	250 m/min	P
Steel $< 750 \text{ N/mm}^2$	suitable	230 m/min	P
Steel $< 900 \text{ N/mm}^2$	suitable	200 m/min	P
Steel $< 1100 \text{ N/mm}^2$	suitable	180 m/min	P
Steel $< 1400 \text{ N/mm}^2$	suitable	170 m/min	P
TOOLOX 33	suitable	115 m/min	H
TOOLOX 44	suitable	80 m/min	H
INOX $< 900 \text{ N/mm}^2$	suitable	110 m/min	M

INOX > 900 N/mm <sup>2</sup>	suitable	90 m/min	M
Uni	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable		
dry	Suitable only under restricted conditions		
Air	suitable		

**Services**

Shank grinding Type HB	129100 HB
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