

**Garant**
**Solid carbide torus cutter HPC DIN 6535 HA, TiAlN, Ø DC / R1: 20/3,0mm**

**Order data**

Order number	206351 20/3,0
GTIN	4045197706331
Item class	11X

**Description**
**Version:**

Dimensions to DIN 6527 and 38° flutes.

Tolerance: Corner radius  $R_1 = \pm 0.005 \text{ mm}$ .

**Note:**

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 206345**

**Technical description**

Cutting edge Ø $D_c$	20 mm
Recess Ø $D_1$	19 mm
Corner radius $R_1$	3 mm
Overhang length $L_1$ incl. recess	55 mm
Feed $f_z$ for copy milling in stainless steel $> 900 \text{ N/mm}^2$	0.1 mm
No. of teeth $Z$	4
Feed $f_z$ for side milling in INOX $> 900 \text{ N/mm}^2$	0.082 mm
Shank Ø $D_s$	20 mm
Flute length $L_c$	38 mm
Overall length $L$	104 mm
Shank	DIN 6535 HA to h6
Helix angle	38 degrees

Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Tolerance nominal $\varnothing$	e8
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×D for side milling
Cutting width $a_e$ for milling operation	0.05×D for copy 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 N/mm <sup>2</sup>	suitable	250 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	230 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	200 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	180 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	170 m/min	P
TOOLOX 33	suitable	115 m/min	H
TOOLOX 44	suitable	80 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
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	S

Uni	suitable only under restricted conditions
wet maximum	suitable
wet minimum	Suitable
dry	Suitable only under restricted conditions
Air	suitable only under restricted conditions
<b>Services</b>	
Shank grinding Type HB	129100 HB