

## Garant

### GARANT Master Titan solid carbide torus cutter HPC, TiAlN, Ø DC / R1: 12/1,0mm



#### Order data

Order number	206364 12/1,0
GTIN	4045197991911
Item class	11Z

#### Description

##### Version:

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

##### Application:

For milling **titanium and titanium alloys**; with very smooth cutting action for optimum tool life and top metal removal rate.

#### Technical description

Helix angle	40 degrees
Corner radius $R_1$	1 mm
No. of teeth Z	4
Shank $\varnothing D_s$	12 mm
Cutting edge $\varnothing D_c$	12 mm
Shank	DIN 6535 HA to h6
Overhang length $L_1$ incl. recess	38 mm
Feed $f_z$ for side milling in titanium $> 850 \text{ N/mm}^2$	0.05 mm
Overall length L	83 mm
Recess $\varnothing D_1$	11.6 mm
Feed $f_z$ for copy milling in titanium $> 850 \text{ N/mm}^2$	0.07 mm
Correction factor for $v_c$	1.5

Flute length $L_c$	26 mm
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	0.5×D for side milling
Through-coolant	no
Machining strategy	HPC
Shank tolerance	h6
Colour ring	pink
Type of product	Torus cutter

## User data

	Suitability	$V_c$	ISO code
Ti > 850 N/mm <sup>2</sup>	suitable	60 m/min	S
wet maximum	suitable		

## Services

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