

Garant
**GARANT Master Steel solid carbide torus cutter HPC, TiAlN, Ø DC / R1:
20/1,0mm**

Order data

Order number	206359 20/1,0
GTIN	4045197943569
Item class	11X

Description
Version:

Tolerance: Corner radius $R_1 = \pm 0.01$ mm.

Advantage:

Optimised flute form, eccentric relief ground, wide chip space.

HPC milling cutters with various corner radii for all radial transitions.

Technical description

Feed f_z for slot milling in steel < 900 N/mm ²	0.1 mm
Feed f_z for side milling in steel < 900 N/mm ²	0.13 mm
Corner radius R_1	1 mm
Shank	DIN 6535 HB to h6
Shank $\varnothing D_s$	20 mm
Helix angle	38 degrees
Flute length L_c	41 mm
Cutting edge $\varnothing D_c$	20 mm
No. of teeth Z	4
Recess $\varnothing D_1$	19.5 mm
Overhang length L_1 incl. recess	74 mm
Overall length L	126 mm

Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal \varnothing	f8
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	Full slot cutting depth $1 \times D$
Cutting width a_e for milling operation	$0.3 \times D$ 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 N/mm ²	suitable	260 m/min	P
Steel < 750 N/mm ²	suitable	240 m/min	P
Steel < 900 N/mm ²	suitable	190 m/min	P
Steel < 1100 N/mm ²	suitable	180 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	150 m/min	P
INOX < 900 N/mm ²	suitable	80 m/min	M
INOX > 900 N/mm ²	suitable	70 m/min	M
GG(G)	suitable	250 m/min	K
Uni	suitable		
wet maximum	suitable		

wet minimum	suitable only under restricted conditions
dry	suitable
Air	suitable