Garant

GARANT Master UNI solid carbide torus cutter, TiSiN, ⌀ DC / R1: 16/2,0mm

Order data

Order number	206367 16/2,0
GTIN	4067263047117
Item class	11Z

Description

Version:
For **roughing and finishing at very high feed rates** with smooth cutting action. **Newly developed geometry and high-performance coating** for outstanding production results and very long tool life with a variety of materials. Unequal spacing gives **high intrinsic stability** and smooth cutting action. Tolerance: corner radius **R_1 = ±0.005 mm.**
Dimensions similar to **DIN 6527.**
Advantage:
· **Particularly low vibration running.**
· **Special flute profile, large flutes.**
· **Specially matched edge honing.**
· **Optimised substrate for hardness and toughness.**

Technical description

Recess ⌀ D_1	15.5 mm
Helix angle	42 degrees
Feed f_z for side milling in steel < 900 N/mm^2	0.1 mm
Shank	DIN 6535 HB to h6
Feed f_z for copy milling in stainless steel > 900 N/mm^2	0.075 mm
No. of teeth Z	4
Flute length L_c	36 mm
Corner radius R_1	2 mm

Feed f_z for copy milling in steel < 900 N/mm²	0.125 mm
Overhang length L_1 incl. recess	44 mm
Overall length L	92 mm
Feed f_z for side milling in INOX > 900 N/mm²	0.06 mm
Cutting edge ∅ D_C	16 mm
Shank ∅ D_s	16 mm
Series	Master Uni
Coating	TiSiN
Tool material	Solid carbide
Standard	Works standard
Type	N
Tolerance nominal ∅	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	0.3×D for side milling
Cutting width a_e for milling operation	0.05×D for copy milling
Through-coolant	no
Machining strategy	HPC
Type of product	Torus cutter

User data

	Suitability	V_c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	280 m/min	N
Steel < 500 N/mm²	suitable	260 m/min	P
Steel < 750 N/mm²	suitable	240 m/min	P
Steel < 900 N/mm²	suitable	190 m/min	P

Steel < 1100 N/mm²	suitable	180 m/min	P
Steel < 1400 N/mm²	suitable	150 m/min	P
INOX < 900 N/mm²	suitable	90 m/min	M
INOX > 900 N/mm²	suitable	80 m/min	M
Ti > 850 N/mm²	suitable	40 m/min	S
GG(G)	suitable only under restricted conditions	250 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		