Garant

GARANT Master Steel solid carbide torus cutter HPC, TiAlN, ∅ e8 DC / R1: 1/0,2mm

Order data

Order number	206333 1/0,2
GTIN	4062406276140
Item class	11X

Description

Version:
HPC milling cutter with **newly developed high-performance coating.** For **outstanding tool life** and **optimum metal removal rates** in a range of materials.
With **double relief ground side clearance angle.**
Tolerance: Corner radius $\mathbf{R_1}$
Radius size 0.1 mm – 1 mm: $\mathbf{R_1 = \pm 0.003}$ **mm.**
Radius size > 1.0 mm: $\mathbf{R_1 = \pm 0.005}$ **mm.**
Application:
Especially for **high speed machining** in **mould and tool making** for **copy milling.** Excellent results for **dry milling.**
Note:
Successor product to No. 206280.

Technical description

Flute length L_c	1.5 mm
Shank	DIN 6535 HA to h6
Overall length L	50 mm
No. of teeth Z	4
Overhang length L_1 incl. recess	10 mm
Feed f_z for copy milling in steel < 1100 N/mm^2	0.006 mm
Feed f_z for side milling in steel < 1100 N/mm^2	0.005 mm

Helix angle	30 degrees
Shank ⌀ D_s	3 mm
Cutting edge ⌀ D_C	1 mm
Corner radius R_1	0.2 mm
minimum shank recess dia. D_5	0.85 mm
maximum shank recess dia. D_6	0.95 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	H
Tolerance nominal ⌀	e8
Direction of infeed	horizontal, oblique and vertical
Cutting width a_e for milling operation	0.03×D for copy milling
Cutting width a_e for milling operation	0.2×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/mm²	suitable only under restricted conditions	200 m/min	P
Steel < 750 N/mm²	suitable	170 m/min	P
Steel < 900 N/mm²	suitable	120 m/min	P
Steel < 1100 N/mm²	suitable	85 m/min	P
Steel < 1400 N/mm²	suitable	70 m/min	P
Steel < 55 HRC	suitable	40 m/min	H

INOX < 900 N/mm²	suitable	95 m/min	M
INOX > 900 N/mm²	suitable	85 m/min	M
GG(G)	suitable	110 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		