Garant

Solid carbide barrel milling cutter, tangential form PPC, TiAlN, ⌀ f8 DC / R2: 12/85mm

Order data

Order number	207525 12/85
GTIN	4045197922656
Item class	11X

Description

Version:
High-performance tool for **exceptionally efficient finish machining of free-form surfaces.** For outstanding surface qualities in a **very short machining time.** For use on modern 5-axis milling machines with CAD / CAM support.
The end face geometry is designed so that the chips, especially those formed by the end radius, are of optimum shape and have optimum evacuation characteristics. For this purpose the number of cutting edges is reduced to the number of effective end face cutting edges.
Recommendation:
As an oversize for finishing operations we recommend 0.05 to 0.2 mm.
Note:
R_2 represents the effective radius on the tool.
Cannot be reground!

Technical description

Feed f_z for side milling in steel < 900 N/mm^2	0.07 mm
Overall length L	93 mm
Shank ⌀ D_s	12 mm
No. of teeth Z	4
Feed f_z for copy milling in steel < 900 N/mm^2	0.09 mm
Flute length L_c	27 mm
Effective radius R_2	85 mm

Corner radius R_1	2 mm
Helix angle	30 degrees
Coating	TiAlN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal ∅	f8
Direction of infeed	horizontal
Cutting width a_e for milling operation	0.05×D for side milling
Cutting width a_e for milling operation	0.05×D for copy milling
Shank	DIN 6535 HA to h6
Through-coolant	no
Machining strategy	PPC
Colour ring	green
Type of product	Ball-nosed slot drill

User data

	Suitability	V_c	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	200 m/min	N
Alu > 10% Si	suitable only under restricted conditions	200 m/min	N
Steel < 500 N/mm²	suitable	250 m/min	P
Steel < 750 N/mm²	suitable	200 m/min	P
Steel < 900 N/mm²	suitable	180 m/min	P
Steel < 1100 N/mm²	suitable	150 m/min	P
Steel < 1400 N/mm²	suitable	130 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	90 m/min	H
INOX < 900 N/mm²	suitable	130 m/min	M

INOX > 900 N/mm²	suitable	120 m/min	M
Ti > 850 N/mm²	suitable only under restricted conditions	60 m/min	S
GG(G)	suitable	300 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable only under restricted conditions		
Air	suitable only under restricted conditions		

Services

Shank grinding Type HB	129100 HB