

Garant

Solid carbide barrel milling cutter, conical form $\alpha/2 = 18^\circ$ PPC, TiAlN, \varnothing f8 DC / R2: 12/500mm



Order data

Order number	207532 12/500
GTIN	4045197922670
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!

For machining walls and overcoming obstructions.

Technical description

Feed f_z for side milling in steel $< 900 \text{ N/mm}^2$	0.07 mm
Flute length L_c	14.5 mm
Shank $\varnothing D_s$	12 mm
Feed f_z for copy milling in steel $< 900 \text{ N/mm}^2$	0.09 mm
Overall length L	90 mm
No. of teeth Z	4
Effective radius R_2	500 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 \varnothing	f8
Direction of infeed	horizontal
Cutting width a_e for milling operation	0.05×D for copy milling
Cutting width a_e for milling operation	0.05×D for side milling
Shank	DIN 6535 HA to h6
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/mm ²	suitable	250 m/min	P
Steel < 750 N/mm ²	suitable	200 m/min	P
Steel < 900 N/mm ²	suitable	180 m/min	P
Steel < 1100 N/mm ²	suitable	150 m/min	P
Steel < 1400 N/mm ²	suitable	130 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	90 m/min	H
INOX < 900 N/mm ²	suitable	130 m/min	M
INOX > 900 N/mm ²	suitable	120 m/min	M

Ti > 850 N/mm ²	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
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