

Garant
Solid carbide barrel milling cutter, short conical form $\alpha/2 = 72^\circ$ PPC, TiAlN, \emptyset f8 DC / R2: 12/220mm

Order data

Order number	207546 12/220
GTIN	4045197938237
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.

Recommendation:

We recommend 0.05 to 0.2mm as an allowance for finishing operations.

Note:

R_2 represents the effective radius on the tool.

Cannot be reground!

For surface machining and avoidance of interferences.

Technical description

Flute length L_c	2.5 mm
Corner radius R_1	2 mm
Shank $\emptyset D_s$	12 mm
Cutting edge $\emptyset D_c$	12 mm
Feed f_z for copy milling in steel $< 900 \text{ N/mm}^2$	0.09 mm
Helix angle	30 degrees
Effective radius R_2	220 mm
No. of teeth Z	5
Overall length L	120 mm

Feed f_z for side milling in steel < 900 N/mm ²	0.07 mm
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 side milling
Cutting width a_e for milling operation	0.05×D for copy 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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