

Garant
Solid carbide milling cutter TPC, uncoated, Ø h6 DC: 12mm

Order data

Order number	202281 12
GTIN	4045197773319
Item class	11X

Description
Version:

Eccentric relief ground, additionally **polish ground** in the flutes for **outstanding chip evacuation** in long-chipping aluminium workpieces.

With double chip-breaker for exemplary chip formation.

Note:

$a_{e \max} = 0.12 \times D$ for TPC machining.

h_{\max} : The values stated in the table are maximum values.

Technical description

Recess Ø D_1	11 mm
Shank	DIN 6535 HA to h6
Balance quality with shank	G 2.5 with HA
Corner chamfer width at 45°	0.2 mm
Shank form	HA
Overhang length L_1 incl. recess	60 mm
No. of teeth Z	3
Shank Ø D_s	12 mm
Direction of infeed	horizontal, oblique and vertical
Flute length L_c	49 mm
Overall length L	109 mm
Cutting edge Ø D_c	12 mm

Tolerance nominal \varnothing	h6
Average chip thickness h_{\max} for TPC milling in short-chipping aluminium	0.075 mm
Helix angle	45 degrees
Corner chamfer angle	45 degrees
Coating	uncoated
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Helix angle characteristic	unequal spacing
Cutting width a_e for milling operation	$0.12 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	yellow
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Aluminium	Suitable	130 m/min	N
Aluminium (short chipping)	suitable	100 m/min	N
Alu > 10% Si	suitable	85 m/min	N
PMMA acrylic	suitable	125 m/min	N
PE-HD	Suitable	90 m/min	N
PA 66	Suitable	100 m/min	N
PEEK	suitable	80 m/min	N
PF 31	Suitable	70 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	100 m/min	N
Cu	Suitable	70 m/min	N

CuZn	Suitable	90 m/min	N
wet maximum	suitable		
wet minimum	suitable		
dry	suitable only under restricted conditions		
Air	suitable only under restricted conditions		
Services			
Shank grinding Type HB			129100 HB