

Garant
GARANT Master Alu solid carbide milling cutter with more chip separators
TPC, DLC, Ø h6 DC: 5mm

Order data

Order number	203115 5
GTIN	4062406249694
Item class	11X

Description
Version:

Specially designed for TPC high-performance milling. **Optimised bending strength** due to the use of ultra-fine grain substrates. **1xD** chip separator for controlled chip breaking.

Balanced for very high process reliability and protecting the machine at high speeds.

Application:

Especially for milling **aluminium and non-ferrous metals**.

Note:

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

$ae_{\max} = 0.1 \times D$ for TPC machining.

Successor product for No. 202283, 202284.

Technical description

Shank Ø D_s	6 mm
Overhang length L_1 incl. recess	36 mm
Helix angle	38 degrees
Average chip thickness h_{\max} for TPC milling in short-chipping aluminium	0.03 mm
No. of teeth Z	4
Recess Ø D_1	4.5 mm
Shank form	HA
Shank	DIN 6535 HA to h6

Overall length L	75 mm
Balance quality with shank	G 2.5 with HA
Flute length L_c	26 mm
Direction of infeed	horizontal and oblique
Tolerance nominal \varnothing	h6
Cutting edge $\varnothing D_c$	5 mm
Corner rounding r_v	0.05 mm
Series	Master Alu
Coating	DLC
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	$0.1 \times D$
Through-coolant	no
Machining strategy	TPC
Colour ring	yellow
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Aluminium	suitable	500 m/min	N
Aluminium (short chipping)	suitable	450 m/min	N
Alu > 10% Si	suitable	400 m/min	N
PMMA acrylic	Suitable	180 m/min	N
PE-HD	Suitable	140 m/min	N
PA 66	Suitable	180 m/min	N
PEEK	Suitable	130 m/min	N

PF 31	Suitable	110 m/min	N
PVDF GF20	suitable	160 m/min	N
POM GF25	Suitable	140 m/min	N
PA 66 GF30	Suitable	120 m/min	N
PEEK GF30	Suitable	140 m/min	N
PTFE CF25	Suitable	260 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	260 m/min	N
Cu	Suitable	140 m/min	N
CuZn	suitable	120 m/min	N
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		

Services

Shank grinding Type HB

129100 HB