Garant

GARANT Master Alu solid carbide milling cutter with more chip separators TPC, DLC, ⌀ h6 DC: 12mm

Order data

Order number	203115 12
GTIN	4062406249731
Item class	11X

Description

Version:
Specially designed for TPC high-performance milling. **Optimised bending strength** due to the use of ultra-fine grain substrates. **1×D** 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×D for TPC machining.
Successor product for No. 202283, 202284.

Technical description

Average chip thickness h_{max} for TPC milling in short-chipping aluminium	0.072 mm
Shank ⌀ D_s	12 mm
Overall length L	120 mm
Direction of infeed	horizontal and oblique
Shank form	HB
Recess ⌀ D_1	11 mm
Tolerance nominal ⌀	h6
Balance quality with shank	G 2.5 with HB

Helix angle	38 degrees
Shank	DIN 6535 HB to h6
Overhang length L_1 incl. recess	72 mm
No. of teeth Z	4
Cutting edge Ø D_C	12 mm
Flute length L_c	61 mm
Corner rounding r_v	0.1 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×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		