# Garant

# GARANT Master Alu solid carbide milling cutter with more chip separators TPC, DLC, $\emptyset$ h6 DC: 8mm



# Order data

Order number	2031148		
GTIN	4062406249649		
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:** 

#### Application:

Especially for milling aluminium and non-ferrous metals.

#### Note:

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

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

Successor product for No. 202281, 202282.

# **Technical description**

Flute length L <sub>c</sub>	33 mm	
Average chip thickness h <sub>max</sub> for TPC milling in short- chipping aluminium	0.052 mm	
Direction of infeed	horizontal and oblique	
Tolerance nominal Ø	h6	
Helix angle	38 degrees	
No. of teeth Z	4	
Shank	DIN 6535 HA to h6	
Balance quality with shank	G 2.5 with HA	

Shank form	НА		
Shank Ø Ds	8 mm		
Cutting edge Ø $D_c$	8 mm		
Recess Ø D <sub>1</sub>	7.5 mm		
Overall length L	80 mm		
Overhang length L <sub>1</sub> incl. recess	40 mm		
Corner rounding r <sub>v</sub>	0.1 mm		
Series	Master Alu		
Coating	DLC		
Tool material	Solid carbide		
Standard	Manufacturer's standard		
Туре	W		
Spacing of the cutters	unequal spacing		
Cutting width $a_e$ for milling operation	0.12×D		
Through-coolant	no		
Machining strategy	TPC		
Colour ring	yellow		
Type of product	End / face mill		

# User data

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

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

Shank grinding Type HB

129100 HB