

**Garant**
**Solid carbide milling cutter with internal cooling MTC, DLC, Ø h6 DC: 12mm**

**Order data**

Order number	202279 12
GTIN	4045197746276
Item class	11X

**Description**
**Version:**

With the latest generation of **DLC coating sp<sup>2</sup>**.

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

**Application:**

Especially for **MTC (Multi Task Cutting)** use on the new generation of turning / milling centres.

**Note:**

**NEW GENERATION AVAILABLE!**

**Recommended successor product is No. 202019.**

**Technical description**

Tolerance nominal Ø	h6
Shank form	HA
Corner chamfer width at 45°	0.2 mm
Overall length L	120 mm
Overhang length L <sub>1</sub> incl. recess	73 mm
Feed f <sub>z</sub> for slot milling in short-chipping aluminium	0.05 mm
Flute length L <sub>c</sub>	19 mm
No. of teeth Z	3
Shank Ø D <sub>s</sub>	12 mm
Direction of infeed	horizontal, oblique and vertical

Balance quality with shank	G 2.5 with HA
Cutting edge $\varnothing D_c$	12 mm
Recess $\varnothing D_1$	11 mm
Feed $f_z$ for side milling in short-chipping aluminium	0.07 mm
Shank	DIN 6535 HA to h6
Helix angle	45 degrees
Corner chamfer angle	45 degrees
Coating	DLC
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	W
Helix angle characteristic	unequal spacing
Cutting width $a_e$ for milling operation	0.3×D for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Through-coolant	yes
Machining strategy	MTC
Colour ring	yellow
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium	Suitable	440 m/min	N
Aluminium (short chipping)	suitable	400 m/min	N
Alu > 10% Si	suitable	360 m/min	N
PMMA acrylic	suitable	180 m/min	N
PE-HD	Suitable	150 m/min	N
PA 66	Suitable	180 m/min	N
PEEK	suitable	140 m/min	N

PF 31	Suitable	120 m/min	N
PVDF GF20	suitable	170 m/min	N
POM GF25	Suitable	150 m/min	N
PA 66 GF30	suitable	140 m/min	N
PEEK GF30	suitable	120 m/min	N
PTFE CF25	suitable	150 m/min	N
Honeycomb sandwich	suitable only under restricted conditions	280 m/min	N
Cu	Suitable	150 m/min	N
CuZn	Suitable	190 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