

**Garant**
**Solid carbide deburrer, spiral flutes 60°, TiSiN, Ø h6 DC: 12Mmm**

**Order data**

Order number	208165 12M
GTIN	4062406380380
Item class	11X

**Description**
**Version:**

**Outstanding surface qualities** thanks to the **35° helix angle**.

Deburrer for **universal application** on virtually all materials. The newly developed coating effectively prevents built-up edges, even in aluminium or stainless steel.

Tolerance: **Dimension S = ± 0.2 mm. Point angle ±5 arc minutes**. Extra-long deburrers for outstanding deburring results on particularly difficult-to-access contours. Tools without tip.

**Application:**

Perfectly suitable for **chamfering** and **deburring** component edges and for **contouring applications**.

No. of teeth Z: 4

Shank: DIN 6535 HA to h6

Chamfer mill: 30 °

small Ø D<sub>3</sub>: 6 mm

large Ø D<sub>2</sub>: 12 mm

No. of teeth Z: 4

Dimension S: 5.9 mm

Overall length L: 120 mm

Shank Ø D<sub>s</sub>: 12 mm

**Technical description**

No. of teeth Z	4
Shank	DIN 6535 HA to h6
large Ø D <sub>2</sub>	12 mm

Shank $\varnothing D_s$	12 mm
small $\varnothing D_3$	6 mm
Overall length L	120 mm
Dimension S	5.9 mm
Corner chamfer angle	60°
Chamfer mill	30°
Feed $f_z$ in steel < 900 N/mm <sup>2</sup>	0.06 mm
Cutting edge $\varnothing D_c$	12 mm
Coating	TiSiN
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N
Tolerance nominal $\varnothing$	h6
Helix angle	35°
Direction of infeed	horizontal and oblique
Countersink tip angle	60°
Through-coolant	no
Shank tolerance	h6
Colour ring	green
Type of product	Deburrers

## User data

	Suitability	$V_c$	ISO code
Alu plastics	Suitable only under restricted conditions	180 m/min	N
Aluminium (short chipping)	suitable	300 m/min	N
Alu > 10% Si	suitable	220 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	130 m/min	P

Steel < 750 N/mm <sup>2</sup>	suitable	115 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	80 m/min	P
Steel < 1400 N/mm <sup>2</sup>	Suitable only under restricted conditions	65 m/min	P
Steel < 55 HRC	Suitable only under restricted conditions	35 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	90 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	70 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	50 m/min	S
GG(G)	suitable	100 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	Suitable only under restricted conditions		
Air	Suitable only under restricted conditions		