

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**.

Technical description

No. of teeth Z	4
Shank	DIN 6535 HA to h6
large Ø D ₂	12 mm
Shank Ø D _s	12 mm
small Ø D ₃	6 mm
Overall length L	120 mm
Dimension S	5.9 mm
Corner chamfer angle	60 degrees
Chamfer mill	30 degrees

Feed f_z in steel < 900 N/mm ²	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 degrees
Direction of infeed	horizontal and oblique
Countersink tip angle	60 degrees
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 ²	suitable	130 m/min	P
Steel < 750 N/mm ²	suitable	115 m/min	P
Steel < 900 N/mm ²	suitable	110 m/min	P
Steel < 1100 N/mm ²	suitable	80 m/min	P
Steel < 1400 N/mm ²	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 ²	suitable	90 m/min	M
INOX > 900 N/mm ²	suitable	70 m/min	M
Ti > 850 N/mm ²	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		