

# GARANT Master Steel FEED solid carbide drill, Weldon shank DIN 6535 HB, TiAIN, Ø DC h7: 12mm



Order data	
Order number	123236 12
GTIN	4045197843258
Item class	11E

### **Description**

#### **Version:**

- **3-flute drill**, specially developed for **use at very high feed rates**. Outstandingly suitable for machines with **high installed power** and stable machining conditions.
- Special cutter geometry with stable cutting edges and large clearance at the centre enables very high feed rates.
- The patented tip is optimised for chip flow and generates low cutting pressure with good chip breakage.

The sector-leading technology of the drill point guarantees optimum self-centring behaviour. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

#### Note:

Flute length  $L_c = L_2 + 1.5 \times D_c$ .

For process reliability when using the 12×D deep-hole drill, an initial centre drilling with an NC spotting drill No. 121130 with **155° point angle** is necessary.

## **Technical description**

Tolerance nominal Ø	h7		
Number of cutting edges Z	3		
Shank Ø D <sub>s</sub>	12 mm		
Standard	Manufacturer's standard		
Flute length L <sub>c</sub>	156 mm		
Nominal Ø D <sub>C</sub>	12 mm		

recommended maximum drilling depth $L_2$	138 mm		
Overall length L	204 mm		
Feed f in steel < 1100 N/mm <sup>2</sup>	0.5 mm/rev.		
Series	Master Steel		
Coating	TiAIN		
Tool material	Solid carbide		
Version	12×D		
Point angle	140 degrees		
Shank	DIN 6535 HB to h6		
Through-coolant	yes, to 25 bar		
Machining strategy	HPC		
Semi-Standard	yes		
Colour ring	green		
Type of product	Jobber drill		

# **User data**

	Suitability	<b>V</b> <sub>c</sub>	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	120 m/min	Р
Steel < 750 N/mm <sup>2</sup>	suitable	110 m/min	Р
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	Р
Steel < 1100 N/mm <sup>2</sup>	suitable	90 m/min	Р
Steel < 1400 N/mm <sup>2</sup>	suitable	70 m/min	Р
Steel < 55 HRC	suitable	60 m/min	Н
INOX < 900 N/mm <sup>2</sup>	suitable	55 m/min	М
INOX > 900 N/mm <sup>2</sup>	suitable	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	40 m/min	S
GG	suitable	120 m/min	K
GGG	suitable	80 m/min	K

Uni	suitable	
wet maximum	suitable	
wet minimum	suitable	