## Garant

# GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TiAIN, Ø DC h7: 14,8mm

versi 2333300

#### Order data

Order number	123235 14,8
GTIN	4045197841124
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 operating 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 drill, an initial centre drilling with an NC spotting drill No. 121130 with **155° point angle** is necessary.

#### **Technical description**

Number of cutting edges Z	3	
recommended maximum drilling depth $L_2$	185.8 mm	
Standard	Manufacturer's standard	
Feed f in steel < 1100 N/mm <sup>2</sup>	< 1100 N/mm <sup>2</sup> 0.61 mm/rev.	
Overall length L	260 mm	
Flute length L <sub>c</sub>	208 mm	

Tolerance nominal Ø	h7	
Shank Ø D <sub>s</sub>	16 mm	
Nominal Ø D <sub>c</sub>	14.8 mm	
Series	Master Steel	
Coating	TiAIN	
Tool material	Solid carbide	
Version	12×D	
Point angle	140 degrees	
Shank	DIN 6535 HA 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	V <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	Μ
Ti > 850 N/mm²	suitable only under restricted conditions	40 m/min	S
GG	suitable	120 m/min	К
GGG	suitable	80 m/min	К

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Uni	suitable	
wet maximum	suitable	
<del>wet minimum</del> Services	suitable	

Shank grinding Type HE

129100 HE