

GARANT Master Steel FEED solid carbide drill, Weldon shank DIN 6535 HB, TiAIN, Ø DC h7: 15mm



Order data Order number 123236 15 GTIN 4045197843371 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

| recommended maximum drilling depth L_2 | 185.5 mm | |
|--|-------------------------|--|
| Shank Ø D _s | 16 mm | |
| Feed f in steel < 1100 N/mm ² | 0.61 mm/rev. | |
| Overall length L 260 mm | | |
| Flute length L _c | 208 mm | |
| Standard | Manufacturer's standard | |

| Number of cutting edges Z | 3 | | |
|---------------------------|-------------------|--|--|
| Tolerance nominal Ø | h7 | | |
| Nominal Ø D _c | 15 mm | | |
| 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 | \mathbf{V}_{c} | ISO code |
|--------------------------------|---|------------------|----------|
| Steel < 500 N/mm ² | suitable | 120 m/min | Р |
| Steel < 750 N/mm ² | suitable | 110 m/min | Р |
| Steel < 900 N/mm ² | suitable | 100 m/min | Р |
| Steel < 1100 N/mm ² | suitable | 90 m/min | Р |
| Steel < 1400 N/mm ² | suitable | 70 m/min | Р |
| Steel < 55 HRC | suitable | 60 m/min | Н |
| INOX < 900 N/mm ² | suitable | 55 m/min | M |
| $INOX > 900 \text{ N/mm}^2$ | suitable | 50 m/min | M |
| Ti > 850 N/mm ² | 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 | |