

## Garant

### GARANT Master Steel SPEED solid carbide drill, plain shank DIN 6535 HA, TiAlN, Ø DC h7: 20mm



#### Order data

|              |               |
|--------------|---------------|
| Order number | 122425 20     |
| GTIN         | 4045197786456 |
| Item class   | 11E           |

#### Description

##### Version:

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low power output** and high speeds.

- **Clear reduction in cutting forces due to special cutter geometry.**
- **Coating for best wear resistance even at high process temperatures.**
- **Polished flutes for good chip clearance.**

A **slim chisel edge** and the **special arrangement of the 4 guide chamfers** ensure **high positioning and alignment accuracy**. Optimised micro-geometry for increased working life and performance capability.

##### Note:

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

Versions HB and HE supplied at the same price as HA.

Form **HB**: state **No.122426** on the order.

Form **HE**: order with **No.122425 + 129100HE**.

#### Technical description

|  |              |
|--|--------------|
| Feed f in steel < 1100 N/mm <sup>2</sup> | 0.38 mm/rev. |
| Flute length $L_c$                       | 79 mm        |
| Overall length L                         | 131 mm       |
| Tolerance nominal Ø                      | h7           |
| Nominal Ø $D_c$                          | 20 mm        |
| Shank Ø $D_s$                            | 20 mm        |

|   |                   |
|---|-------------------|
| Shank tolerance                                   | h6                |
| Number of cutting edges Z                         | 2                 |
| Standard  | DIN 6537 K        |
| recommended maximum drilling depth L <sub>2</sub> | 49 mm             |
| Series  | Master Steel      |
| Coating   | TiAlN             |
| Tool material                                     | solid carbide     |
| Version   | 4xD               |
| Point angle                                       | 135 degrees       |
| Shank   | DIN 6535 HA to h6 |
| Through-coolant                                   | yes, with 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                                  | 220 m/min      | P        |
| Steel < 750 N/mm <sup>2</sup>  | suitable                                  | 200 m/min      | P        |
| Steel < 900 N/mm <sup>2</sup>  | suitable                                  | 180 m/min      | P        |
| Steel < 1100 N/mm <sup>2</sup> | suitable                                  | 170 m/min      | P        |
| Steel < 1400 N/mm <sup>2</sup> | suitable                                  | 90 m/min       | P        |
| INOX < 900 N/mm <sup>2</sup>   | suitable only under restricted conditions | 75 m/min       | M        |
| GG                             | suitable                                  | 160 m/min      | K        |
| GGG                            | suitable                                  | 130 m/min      | K        |
| Uni                            | suitable                                  |                |          |
| wet maximum                    | suitable                                  |                |          |

wet minimum  
**Services**

suitable

Shank grinding Type HE

129100 HE