

**Garant**
**GARANT Master Steel SPEED solid carbide drill, Weldon shank DIN 6535 HB, TiAlN, Ø DC h7: 19mm**

**Order data**

Order number	123226 19
GTIN	4045197848413
Item class	11E

**Description**
**Version:**

Developed for use with **very high cutting speeds**. Outstandingly suitable for machines with **low installed power** 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 point** 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  $L_c = L_2 + 1.5 \times D_c$ .

For process reliability when using the 12xD deep-hole drill, an initial centre drilling with No. 121068 – 121130 or 3xD pilot drilling operation with No. 122736 is necessary.

**Technical description**

recommended maximum drilling depth $L_2$	229.5 mm
Tolerance nominal Ø	h7
Flute length $L_c$	258 mm
Number of cutting edges Z	2
Shank Ø $D_s$	20 mm
Nominal Ø $D_c$	19 mm
Standard	Manufacturer's standard

Feed f in steel < 1100 N/mm <sup>2</sup>	0.325 mm/rev.
Overall length L	310 mm
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Version	12xD
Point angle	135 degrees
Shank	DIN 6535 HB to h6
Through-coolant	yes, to 25 bar
Machining strategy	HPC
Pilot drill required	yes, pilot drill
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	160 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	125 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	115 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	105 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	65 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	55 m/min	M
GG	suitable	100 m/min	K
GGG	suitable	95 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable		

