

**Garant****Stub drill set HSS-Co8 No. 113140, type FS with case, TiAlN, Type: 1-10****Order data**

Order number	113540 1-10
GTIN	4045197008442
Item class	11B

**Description****Version:**

Made up of stub drills No. 113140.

Particularly **robust and strong** due to **strengthened core**.

Ground flutes, with high concentricity.

With point geometry shape S (special)

**Advantage:**

**Ideal for drilling shallow holes (approx. 2 - 4xD)** on NC machines and automatic machines.

Shank: Plain shank

Drill range: 1 - 10 mm

Number of drills: 19

Incremental steps of drills: 0.5 mm

**Technical description**

Incremental steps of drills	0.5 mm
Number of drills	19
Drill range	1 - 10 mm

Shank	Plain shank
Number of cutting edges Z	2
Coating	TiAlN
Tool material	HSS Co 8
Standard	DIN 1897
Type	FS
Tolerance nominal $\varnothing$	h8
Point angle	130 °
Helix angle	38 °
Through-coolant	no
with case	yes
Colour ring	without
Type of product	Jobber drill

### User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	87 m/min	N
Aluminium (short chipping)	suitable	56 m/min	N
Alu > 10% Si	suitable only under restricted conditions	50 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	50 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	35 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	12 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	15 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	10 m/min	M

Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	6 m/min	S
Uni	suitable only under restricted conditions		
Oil	suitable		
wet maximum	suitable		

## Accessories

Stub drill HSS-Co8 FS Ø DC h8 4 mm	113140 4
Stub drill HSS-Co8 FS Ø DC h8 9,5 mm	113140 9,5
Stub drill HSS-Co8 FS Ø DC h8 7 mm	113140 7
Stub drill HSS-Co8 FS Ø DC h8 6,5 mm	113140 6,5
Stub drill HSS-Co8 FS Ø DC h8 2 mm	113140 2
Stub drill HSS-Co8 FS Ø DC h8 4,5 mm	113140 4,5
Stub drill HSS-Co8 FS Ø DC h8 9 mm	113140 9
Stub drill HSS-Co8 FS Ø DC h8 5,5 mm	113140 5,5
Stub drill HSS-Co8 FS Ø DC h8 1,5 mm	113140 1,5
Stub drill HSS-Co8 FS Ø DC h8 5 mm	113140 5
Stub drill HSS-Co8 FS Ø DC h8 1 mm	113140 1
Stub drill HSS-Co8 FS Ø DC h8 3,5 mm	113140 3,5
Stub drill HSS-Co8 FS Ø DC h8 10 mm	113140 10
Stub drill HSS-Co8 FS Ø DC h8 8 mm	113140 8
Stub drill HSS-Co8 FS Ø DC h8 7,5 mm	113140 7,5
Stub drill HSS-Co8 FS Ø DC h8 3 mm	113140 3
Stub drill HSS-Co8 FS Ø DC h8 8,5 mm	113140 8,5
Stub drill HSS-Co8 FS Ø DC h8 2,5 mm	113140 2,5
Stub drill HSS-Co8 FS Ø DC h8 6 mm	113140 6