

**Garant****Jobber drill set HSS-E No. 114580 in a case, TiAlN, Type: 1-6****Order data**

Order number	115450 1-6
GTIN	4045197875532
Item class	11B

**Description****Version:**

Composed of jobber drills DIN 338.

High performance drills for outstanding performance. Precision holes due to optimised diamond point geometry and 4-face grinding. The special flute profile yields a significant reduction in cutting forces.

**Technical description**

Shank	Plain shank
Incremental steps of drills	0.1 mm
Number of drills	51
Drill range	1 - 6 mm
Number of cutting edges Z	2
Coating	TiAlN
Tool material	HSS E

## Data sheet

Standard	DIN 338
Tolerance nominal $\varnothing$	h8
Point angle	118 degrees
Helix angle	35 degrees
Through-coolant	no
with case	yes
Colour ring	green
Type of product	Jobber drill

### User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	75 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	65 m/min	N
Alu > 10% Si	suitable only under restricted conditions	60 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	50 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	40 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	35 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	16 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	17 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	13 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	S
GG(G)	suitable	40 m/min	K
CuZn	suitable	50 m/min	N
Uni	suitable		
Oil	suitable		

wet maximum

suitable

**Accessories**

HSS-E jobber drill Ø DC h8 1,3 mm	114580 1,3
HSS-E jobber drill Ø DC h8 2,1 mm	114580 2,1
HSS-E jobber drill Ø DC h8 5,8 mm	114580 5,8
HSS-E jobber drill Ø DC h8 1,7 mm	114580 1,7
HSS-E jobber drill Ø DC h8 1,9 mm	114580 1,9
HSS-E jobber drill Ø DC h8 2,8 mm	114580 2,8
HSS-E jobber drill Ø DC h8 3,2 mm	114580 3,2
HSS-E jobber drill Ø DC h8 1,1 mm	114580 1,1
HSS-E jobber drill Ø DC h8 5 mm	114580 5
HSS-E jobber drill Ø DC h8 1,2 mm	114580 1,2
HSS-E jobber drill Ø DC h8 4,2 mm	114580 4,2
HSS-E jobber drill Ø DC h8 1 mm	114580 1
HSS-E jobber drill Ø DC h8 4,7 mm	114580 4,7
HSS-E jobber drill Ø DC h8 2,6 mm	114580 2,6
HSS-E jobber drill Ø DC h8 6 mm	114580 6
HSS-E jobber drill Ø DC h8 5,3 mm	114580 5,3
HSS-E jobber drill Ø DC h8 5,5 mm	114580 5,5
HSS-E jobber drill Ø DC h8 5,1 mm	114580 5,1
HSS-E jobber drill Ø DC h8 3,3 mm	114580 3,3
HSS-E jobber drill Ø DC h8 5,7 mm	114580 5,7
HSS-E jobber drill Ø DC h8 2,2 mm	114580 2,2
HSS-E jobber drill Ø DC h8 2,5 mm	114580 2,5
HSS-E jobber drill Ø DC h8 3,7 mm	114580 3,7
HSS-E jobber drill Ø DC h8 2 mm	114580 2
HSS-E jobber drill Ø DC h8 4 mm	114580 4

## Data sheet

HSS-E jobber drill Ø DC h8 4,5 mm	114580 4,5
HSS-E jobber drill Ø DC h8 4,3 mm	114580 4,3
HSS-E jobber drill Ø DC h8 4,8 mm	114580 4,8
HSS-E jobber drill Ø DC h8 5,4 mm	114580 5,4
HSS-E jobber drill Ø DC h8 4,6 mm	114580 4,6
HSS-E jobber drill Ø DC h8 3,6 mm	114580 3,6
HSS-E jobber drill Ø DC h8 2,9 mm	114580 2,9
HSS-E jobber drill Ø DC h8 2,4 mm	114580 2,4
HSS-E jobber drill Ø DC h8 3,4 mm	114580 3,4
HSS-E jobber drill Ø DC h8 1,6 mm	114580 1,6
HSS-E jobber drill Ø DC h8 2,3 mm	114580 2,3
HSS-E jobber drill Ø DC h8 4,9 mm	114580 4,9
HSS-E jobber drill Ø DC h8 1,8 mm	114580 1,8
HSS-E jobber drill Ø DC h8 3,9 mm	114580 3,9
HSS-E jobber drill Ø DC h8 3 mm	114580 3
HSS-E jobber drill Ø DC h8 2,7 mm	114580 2,7
HSS-E jobber drill Ø DC h8 5,6 mm	114580 5,6
HSS-E jobber drill Ø DC h8 3,1 mm	114580 3,1
HSS-E jobber drill Ø DC h8 3,8 mm	114580 3,8
HSS-E jobber drill Ø DC h8 1,5 mm	114580 1,5
HSS-E jobber drill Ø DC h8 3,5 mm	114580 3,5
HSS-E jobber drill Ø DC h8 5,9 mm	114580 5,9
HSS-E jobber drill Ø DC h8 4,1 mm	114580 4,1
HSS-E jobber drill Ø DC h8 1,4 mm	114580 1,4
HSS-E jobber drill Ø DC h8 5,2 mm	114580 5,2
HSS-E jobber drill Ø DC h8 4,4 mm	114580 4,4
Empty case for jobber drills to DIN 338 Type 1-6	115470 1-6