

Garant**Jobber drill set HSS-E No. 114580 in a case, TiAlN, Type: 1-13****Order data**

Order number	115450 1-13
GTIN	4045197875587
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.

Through-coolant: no

Shank: Plain shank

Number of cutting edges Z: 2

Drill range: 1 - 13 mm

Number of drills: 25

Incremental steps of drills: 0.5 mm

Technical description

Incremental steps of drills	0.5 mm
Number of drills	25
Shank	Plain shank

Drill range	1 - 13 mm
Number of cutting edges Z	2
Coating	TiAlN
Tool material	HSS E
Standard	DIN 338
Tolerance nominal \varnothing	h8
Point angle	118 °
Helix angle	35 °
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 ²	suitable	50 m/min	P
Steel < 750 N/mm ²	suitable	40 m/min	P
Steel < 900 N/mm ²	suitable	35 m/min	P
Steel < 1100 N/mm ²	suitable	16 m/min	P
INOX < 900 N/mm ²	suitable	17 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	13 m/min	M
Ti > 850 N/mm ²	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 12,5 mm	114580 12,5
HSS-E jobber drill Ø DC h8 11 mm	114580 11
HSS-E jobber drill Ø DC h8 5,5 mm	114580 5,5
HSS-E jobber drill Ø DC h8 4 mm	114580 4
HSS-E jobber drill Ø DC h8 1,5 mm	114580 1,5
HSS-E jobber drill Ø DC h8 10,5 mm	114580 10,5
HSS-E jobber drill Ø DC h8 11,5 mm	114580 11,5
HSS-E jobber drill Ø DC h8 9 mm	114580 9
HSS-E jobber drill Ø DC h8 3 mm	114580 3
HSS-E jobber drill Ø DC h8 6,5 mm	114580 6,5
HSS-E jobber drill Ø DC h8 7 mm	114580 7
HSS-E jobber drill Ø DC h8 10 mm	114580 10
HSS-E jobber drill Ø DC h8 4,5 mm	114580 4,5
HSS-E jobber drill Ø DC h8 2,5 mm	114580 2,5
HSS-E jobber drill Ø DC h8 2 mm	114580 2
HSS-E jobber drill Ø DC h8 8 mm	114580 8
HSS-E jobber drill Ø DC h8 13 mm	114580 13
HSS-E jobber drill Ø DC h8 6 mm	114580 6
HSS-E jobber drill Ø DC h8 5 mm	114580 5
HSS-E jobber drill Ø DC h8 7,5 mm	114580 7,5
HSS-E jobber drill Ø DC h8 3,5 mm	114580 3,5

HSS-E jobber drill Ø DC h8 8,5 mm	114580 8,5
HSS-E jobber drill Ø DC h8 9,5 mm	114580 9,5
HSS-E jobber drill Ø DC h8 1 mm	114580 1
HSS-E jobber drill Ø DC h8 12 mm	114580 12