

Garant**Jobber drill set HSS-E-PM No. 114610 in a case, TiAlN, Type: 1-13****Order data**

Order number	115465 1-13
GTIN	4045197890276
Item class	11B

Description**Version:**

Composed of jobber drills DIN 338.

High-performance HPC twist drills for high-alloy and high tensile materials. Particularly strong due to **strengthened core and a parabolic flute profile**. Point geometry with rake angle correction. Precise concentricity for exact holes.

With form S point.

Technical description

Incremental steps of drills	0.5 mm
Shank	Plain shank
Number of drills	25
Drill range	1 - 13 mm
Number of cutting edges Z	2
Coating	TiAlN

Data sheet

Tool material	HSS E PM
Standard	DIN 338
Tolerance nominal \varnothing	h8
Point angle	130 degrees
Helix angle	38 degrees
Through-coolant	no
Machining strategy	HPC
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	80 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	70 m/min	N
Alu > 10% Si	suitable only under restricted conditions	60 m/min	N
Steel < 750 N/mm ²	suitable only under restricted conditions	50 m/min	P
Steel < 900 N/mm ²	suitable	40 m/min	P
Steel < 1100 N/mm ²	suitable	25 m/min	P
Steel < 1400 N/mm ²	suitable	14 m/min	P
INOX < 900 N/mm ²	suitable only under restricted conditions	20 m/min	M
INOX > 900 N/mm ²	suitable	15 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	12 m/min	S
GG(G)	suitable	50 m/min	K

CuZn	suitable only under restricted conditions	60 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		

Accessories

Jobber drill HSS-E-PMHPC Ø DC h8 4 mm	114610 4
Jobber drill HSS-E-PMHPC Ø DC h8 5 mm	114610 5
Jobber drill HSS-E-PMHPC Ø DC h8 2,5 mm	114610 2,5
Jobber drill HSS-E-PMHPC Ø DC h8 8,5 mm	114610 8,5
Jobber drill HSS-E-PMHPC Ø DC h8 11,5 mm	114610 11,5
Jobber drill HSS-E-PMHPC Ø DC h8 3,5 mm	114610 3,5
Jobber drill HSS-E-PMHPC Ø DC h8 12 mm	114610 12
Jobber drill HSS-E-PMHPC Ø DC h8 6,5 mm	114610 6,5
Jobber drill HSS-E-PMHPC Ø DC h8 7 mm	114610 7
Jobber drill HSS-E-PMHPC Ø DC h8 1,5 mm	114610 1,5
Jobber drill HSS-E-PMHPC Ø DC h8 13 mm	114610 13
Jobber drill HSS-E-PMHPC Ø DC h8 11 mm	114610 11
Jobber drill HSS-E-PMHPC Ø DC h8 3 mm	114610 3
Jobber drill HSS-E-PMHPC Ø DC h8 7,5 mm	114610 7,5
Jobber drill HSS-E-PMHPC Ø DC h8 5,5 mm	114610 5,5
Jobber drill HSS-E-PMHPC Ø DC h8 12,5 mm	114610 12,5
Jobber drill HSS-E-PMHPC Ø DC h8 6 mm	114610 6
Jobber drill HSS-E-PMHPC Ø DC h8 9,5 mm	114610 9,5
Jobber drill HSS-E-PMHPC Ø DC h8 8 mm	114610 8
Jobber drill HSS-E-PMHPC Ø DC h8 10,5 mm	114610 10,5
Jobber drill HSS-E-PMHPC Ø DC h8 2 mm	114610 2
Jobber drill HSS-E-PMHPC Ø DC h8 4,5 mm	114610 4,5

Data sheet

Jobber drill HSS-E-PMHPC Ø DC h8 10 mm	114610 10
Jobber drill HSS-E-PMHPC Ø DC h8 1 mm	114610 1
Jobber drill HSS-E-PMHPC Ø DC h8 9 mm	114610 9
Empty case for jobber drills to DIN 338 Type 1-13	115470 1-13