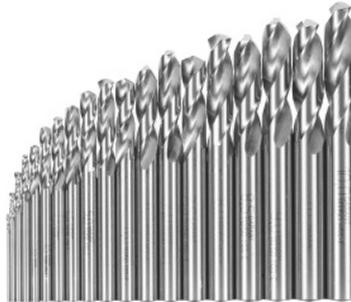


Garant

**Stub drill set HSS-E No. 113150, type N as a refill set, without case, uncoated,
Type: 1-10**

**Order data**

Order number	113730 1-10
GTIN	4062406238704
Item class	11B

Description**Version:**

Made up of stub drills No. 113150.
Particularly robust and strong due to strengthened core.
Ground flutes, with high concentricity.
Bright finish.

Advantage:

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

Through-coolant: no

Shank: Plain shank

Number of cutting edges Z: 2

Drill range: 1 - 10 mm

Number of drills: 19

Incremental steps of drills: 0.5 mm

Technical description

Number of drills	19
Drill range	1 - 10 mm

Shank	Plain shank
Incremental steps of drills	0.5 mm
Number of cutting edges Z	2
Coating	uncoated
Tool material	HSS E
Standard	DIN 1897
Type	N
Tolerance nominal \varnothing	h8
Point angle	130°
Through-coolant	no
with case	no
Colour ring	without
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	45 m/min	N
Alu > 10% Si	suitable only under restricted conditions	50 m/min	N
Steel < 500 N/mm ²	suitable	40 m/min	P
Steel < 750 N/mm ²	suitable	30 m/min	P
Steel < 900 N/mm ²	suitable	25 m/min	P
Steel < 1100 N/mm ²	suitable only under restricted conditions	10 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	8 m/min	P
INOX < 900 N/mm ²	suitable	12 m/min	M

INOX > 900 N/mm ²	suitable only under restricted conditions	8 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	5 m/min	S
GG(G)	suitable	25 m/min	K
CuZn	suitable only under restricted conditions	80 m/min	N
Uni	suitable		
Oil	suitable		
wet maximum	suitable		

Accessories

Stub drill HSS-E N Ø DC h8 1,5 mm	113150 1,5
Stub drill HSS-E N Ø DC h8 2,5 mm	113150 2,5
Stub drill HSS-E N Ø DC h8 2 mm	113150 2
Stub drill HSS-E N Ø DC h8 5,5 mm	113150 5,5
Stub drill HSS-E N Ø DC h8 9 mm	113150 9
Stub drill HSS-E N Ø DC h8 7,5 mm	113150 7,5
Stub drill HSS-E N Ø DC h8 7 mm	113150 7
Stub drill HSS-E N Ø DC h8 3 mm	113150 3
Stub drill HSS-E N Ø DC h8 4,5 mm	113150 4,5
Stub drill HSS-E N Ø DC h8 8,5 mm	113150 8,5
Stub drill HSS-E N Ø DC h8 4 mm	113150 4
Stub drill HSS-E N Ø DC h8 6,5 mm	113150 6,5
Stub drill HSS-E N Ø DC h8 8 mm	113150 8
Stub drill HSS-E N Ø DC h8 5 mm	113150 5
Stub drill HSS-E N Ø DC h8 1 mm	113150 1
Stub drill HSS-E N Ø DC h8 9,5 mm	113150 9,5
Stub drill HSS-E N Ø DC h8 3,5 mm	113150 3,5

Stub drill HSS-E N Ø DC h8 6 mm	113150 6
Stub drill HSS-E N Ø DC h8 10 mm	113150 10