

## Garant

### High-precision countersink set No. 150130 in a box 90°, TiAlN, Number of countersinks: 5



#### Order data

Order number	150301 5
GTIN	4045197911896
Item class	11M

#### Description

##### Version:

High-precision countersink No. 150130.

**All countersinks have 3 cutting edges. Special geometry with extremely unequal spacing** and matching cutting edge preparation. Radially relief ground. Flutes ground from solid. Newly developed **special TiAlN coating** for long service life. High-precision countersink, produced with tight manufacturing tolerances similar to DIN 335-C.

##### Advantage:

Very smooth cutting throughout the entire countersinking operation. Chatter-free running for perfect results and **optimum tool service life**.

##### Application:

High-precision countersinks for production of **precise, round 90° countersunk surfaces**.

##### Content:

1 pc. each countersink: Size 6.3; 10.4; 12.4; 16.5; 20.5

##### Supplied with:

5-piece precision countersink set in a **round box**.

#### Technical description

Number of cutting edges Z	3
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Number of countersinks	5
Coating	TiAlN
Countersink tip angle	90 degrees
Tool material	HSS
Spacing of the countersink cutting edges	unequal spacing
Standard	DIN 335 C
Shank	Parallel shank to h9
Colour ring	green
Type of product	Stepped drill and countersink

### User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable	75 m/min	N
Aluminium (short chipping)	suitable	75 m/min	N
Alu > 10% Si	suitable	50 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	65 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	50 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	18 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	8 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	8 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	16 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	10 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	12 m/min	S
GG(G)	suitable	25 m/min	K
CuZn	suitable	60 m/min	N

Graphite, GRP, CRP	suitable only under restricted conditions
Uni	suitable
wet maximum	suitable
dry	suitable only under restricted conditions

## Accessories

Precision countersink with unequal spacing 90° External Ø Dc 12,4 mm	150130 12,4
Precision countersink with unequal spacing 90° External Ø Dc 10,4 mm	150130 10,4
Precision countersink with unequal spacing 90° External Ø Dc 6,3 mm	150130 6,3
Precision countersink with unequal spacing 90° External Ø Dc 16,5 mm	150130 16,5
Precision countersink with unequal spacing 90° External Ø Dc 20,5 mm	150130 20,5