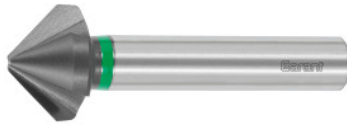


**Garant**
**High-precision countersink 90°, TiAlN, External Ø Dc: 31mm**

**Order data**

Order number	150170 31
GTIN	4045197085672
Item class	11M

**Description**
**Version:**

**All countersinks have 3 cutting edges**, radially relieved.

Flutes are ground from solid.

Precision countersink for considerable performance improvement.

**Application:**

High precision countersinks for chatter-free countersinking.

**Technical description**

for countersunk screws DIN 7991	M16
External Ø	31 mm
Feed f in steel < 500 N/mm <sup>2</sup>	0.2 mm/rev.
smallest countersink Ø for holes from	4.2 mm
Shank tolerance	h9
Shank Ø D <sub>s</sub>	12 mm
Overall length L	71 mm
Number of cutting edges Z	3
Coating	TiAlN
Countersink tip angle	90 degrees
Tool material	HSS

Standard	DIN 335 C
Shank	Plain shank with h9
Through-coolant	no
Colour ring	green
Type of product	Stepped drill and countersink

### User data

	Suitability	V <sub>c</sub>	ISO code
Alu > 10% Si	suitable only under restricted conditions	25 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	34 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	32 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	32 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	9 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	M
CuZn	suitable only under restricted conditions	80 m/min	N
Uni	suitable		
wet maximum	suitable		
dry	suitable only under restricted conditions		