

**Garant**
**Mini counterbore for through holes 180°, uncoated, Counterbore Ø D1 x pin Ø D2: 2,2X1,1mm**

**Order data**

Order number	155700 2,2X1,1
GTIN	4045197462831
Item class	11M

**Description**
**Version:**

Spiral fluted counterbore with fixed pilot.  
DIN 373 / ISO 4206.

**Application:**

**For through hole** quality **fine** (ISO values) to DIN 69.

For socket-head screws to DIN 912, 6912, 7984, and cheese-head screws to ISO 1207 (DIN 84).

**Note:**

Size 4.6 x 2.4 is not defined in DIN.

**Technical description**

Pre-drill Ø	1.1 mm
for screw size	M1
Counterbore Ø	2.2 mm
Number of cutting edges Z	3
Feed f in steel < 500 N/mm <sup>2</sup>	0.07 mm/rev.
Pin Ø	1,1 mm
Shank Ø D <sub>s</sub>	2.2 mm
Overall length L	45 mm
Step height L <sub>1</sub> 1st step with chamfer	2 mm
Point angle	180 degrees

Cutter length $l_c$	7 mm
Coating	uncoated
Tool material	HSS E
Standard	DIN 373
Shank	Plain shank
Countersink angle	180 degrees
Through-coolant	no
Type of product	Counterbore

### User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable	33 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	28 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	27 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable only under restricted conditions	27 m/min	P
INOX < 900 N/mm <sup>2</sup>	Suitable only under restricted conditions	8 m/min	M
INOX > 900 N/mm <sup>2</sup>	Suitable only under restricted conditions	5 m/min	M
wet maximum	suitable		