

▶ COUNTERSINKS & COUNTERBORES CBN-GRINDED



CBN CBN GRINDED

GSR countersinks are produced according to the latest methods and grinded with CBN grinding wheels (CBN= cubic boron nitride). This leads to a high surface finish, sharpness and tool life compared to traditionally grinded countersinks.



i NOTE!

While working with aluminium, we recommend a TiN coated countersink, as otherwise the aluminium chips would stick to the tool.

COUNTERSINKS DIN 335 C 12,4 HSS

Description

DIN 335 = Countersinks with 3 cutting edges 90°

DIN 334 = Countersinks with 3 cutting edges 60°

Form C = 3 cutting edges with cylindrical shank

Form D = 3 edges with Morse taper shank

Labelling according DIN 2197

12.4 mm = D1 = biggest diameter

HSS = High-speed steel

HSS USAGE HSS COUNTERSINKS

Steel, cast steel alloyed and unalloyed up to 900 N/mm² tensile strength, grey cast iron, malleable cast iron, spheroidal graphite iron, die-casting, sintered iron, nickel silver, graphite, short chipping aluminium alloys, brass and bronze.

HSSE USAGE HSSE COUNTERSINKS

additionally usable for hot and cold work steels as well as stainless and acid-resistant steel (V2A / V4A)



COUNTERSINKS

Countersinks have a conical cutting edge geometry. The most common types are 60°, 90° and 120°. They are used for countersinking, deburring and chamfering.

APPLICATION RANGE

60° Countersinks are used for deburring bores.

DIN 334 Form C HSS/HSSE

90° Countersinks are used to make countersunk screws sit flush. DIN 335 Form C HSS/HSSE

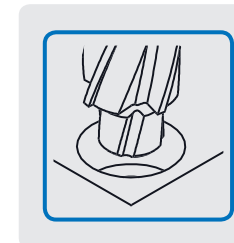
120° Countersinks are used to make mushroom head rivets sit flush. Factory standard Form C



▶ COUNTERBORES

Counterbores in 3 versions **with fixed guiding pins**

Counterbores have spiral flutes and make a flat 180° counterbore according to DIN 974-1. They are used to make socket screws according to DIN 912, 6912, 7984 and cap screws according to ISO 1207 (DIN 84) sit flush. Counterbores for through holes are used to fix countersunk screws with a nut. Counterbores are also used for tap holes.



SENKER DIN 373 8 × 4,5 HSS

Description

DIN 373 = Counterbore with replaceable guiding pin and Morse taper shank

8 mm = Counterbore diameter

4,5 mm = Guiding pin diameter

Labelling according to DIN 2197

HSS = High-speed steel

3 VERSIONS

- for through hole counterbores (medium)
- for through hole counterbores (fine)
- for tap hole counterbores

COUNTERSINKS CBN 90°



TECHNICAL INFORMATION

Standard	DIN 335
Form	C 90°
Shank	Cylindrical shank

Countersink diameter mm	Shank diameter mm	Nose diameter mm	Total length	Art.-No. HSSG	Art.-No. HSSG-TiN	Art.-No. HSSE
4,3	4	1,3	40	04042043	04043043	-
5,0	4	1,5	40	04042050	04043050	-
5,3	4	1,5	40	04042053	04043053	-
5,8	5	1,5	45	04042058	04043058	-
6,0	5	1,5	45	04042060	04043060	-
6,3	5	1,5	45	04042063	04043063	04044063
7,0	6	1,8	50	04042070	04043070	-
7,3	6	1,8	50	04042073	04043073	-
8,0	6	2	50	04042080	04043080	-
8,3	6	2	50	04042083	04043083	04044083
9,4	6	2,2	50	04042094	04043094	-
10,0	6	2,5	50	04042100	04043100	-
10,4	6	2,5	50	04042104	04043104	04044104
11,5	8	2,8	56	04042115	04043115	-
12,4	8	2,8	56	04042124	04043124	04044124
13,4	8	2,9	56	04042134	04043134	-
15,0	10	3,2	60	04042150	04043150	04044150
16,5	10	3,2	60	04042165	04043165	04044165
19,0	10	3,5	63	04042190	04043190	-
20,5	10	3,5	63	04042205	04043205	04044205
23,0	10	3,8	67	04042230	04043230	-
25,0	10	3,8	67	04042250	04043250	04044250
28,0	12	4	71	04042280	04043280	-
30,0	12	4,2	71	04042300	04043300	-
31,0	12	4,2	71	04042310	04043310	04044310
40,0	15	10	80	04042400	04043400	04044400

COUNTERSINKS CBN 60°



TECHNICAL INFORMATION

Standard	DIN 334
Form	C 60°
Shank	Cylindrical shank

Countersink diameter mm	Shank diameter mm	Nose diameter mm	Total length	Art.-No. HSSG	Art.-No. HSSG-TiN
6,3	5	1,6	45	04045063	04046063
8,0	6	2	50	04045080	04046080
10,0	6	2,5	53	04045100	04046100
12,5	8	3,2	56	04045125	04046125
16,0	10	4	63	04045160	04046160
20,0	10	5	67	04045200	04046200
25,0	10	6,3	71	04045250	04046250
31,5	12	10	76	04045315	04046315

COUNTERSINKS CBN 120°



TECHNICAL INFORMATION

Standard	Factory Standard
Form	C 120°
Shank	Cylindrical shank

Countersink diameter mm	Shank diameter mm	Nose diameter mm	Total length	Art.-No. HSSG
6,3	5	1,5	45	04047063
8,3	6	2	50	04047083
10,4	6	2,5	50	04047104
12,4	8	3	56	04047124
16,5	10	3,5	60	04047165
20,5	10	4	60	04047205
25,0	10	5	63	04047250