

## NEW: GSR step drills

Now with 3-surface-shank & CBN ground!

Dear customers,

Today we recommend you our specialists for thin sheet metals: our GSR step drills.

They enable to drill through holes with a variety of bore diameters in thin-walled materials. The GSR step drills are equipped with a practical three-surface-shank, which allows an improved power transmission and minimizes slipping in the drill chuck. Each drill has a lasered scaling that makes it easy to drill an exact diameter. The split point at the tip makes an ideal centring of the drill very easy and provides low feed force.

Our GSR step drills are manufactured using the latest technology and ground with CBN wheels. CBN stands for cubic crystalline born nitride. Since CBN has a significantly higher hardness than conventional materials, it gives the HSS step drills a high surface quality, burr-free and particularly sharp cutting edges as well as a longer tool life. Since cold welding at the cutting edges is reduced, a higher cutting performance is given.

With the GSR step drills you can centre, ream, drill, and deburr with just one single tool!

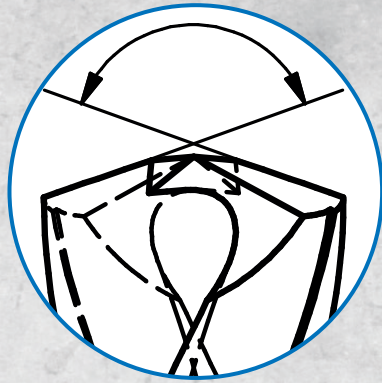
Find out more on the following pages.

Do you have any questions? Or do you directly want to order some drills? Just contact us, we will be pleased to help you!

Your GSR-Team

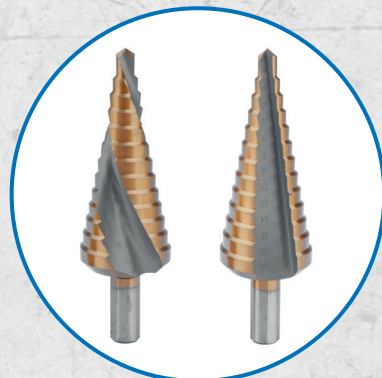
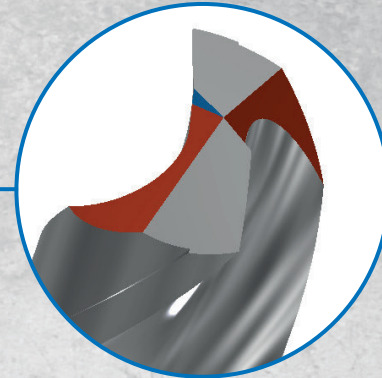






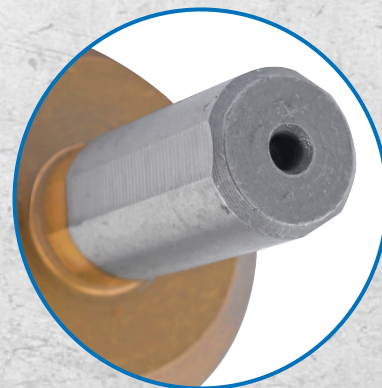
#### TIP GEOMETRY

Our GSR step drills are equipped with a point angle of 135°. This larger point angle enables a shorter drilling time and ideal centring in the material. Additionally, all drills have a split point. This also supports centring and ensures a low feed force. It also enables very good chip removal. Furthermore, the extended main cutting edges protect the small cutting edges, which leads to a longer tool life.



#### 2 DIFFERENT FLUTE PROFILES

spiral fluted (left) and straight fluted (right)

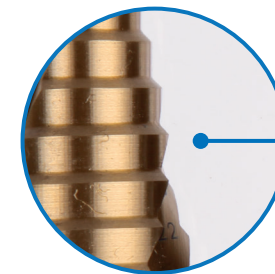
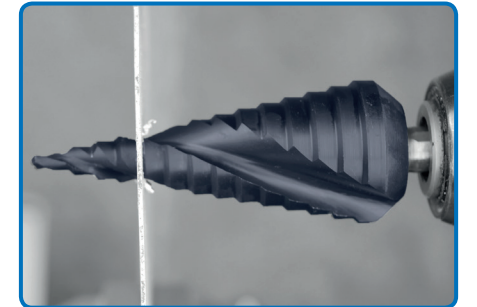
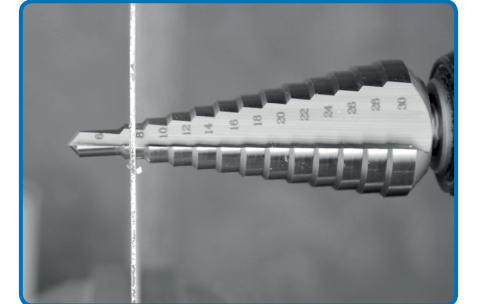
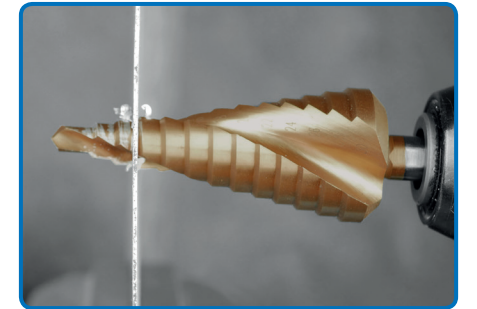


#### THREE-SURFACE-SHANK

minimizes slipping in the drill chuck

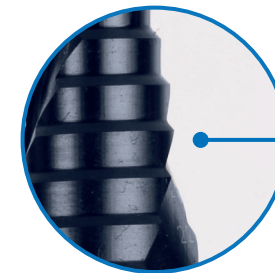
#### ONE PROCESS

centring, reaming, drilling, and deburring in a wide range of materials



#### TiN TITANIUM NITRIDE COATING

The TiN coating is considered as the all-rounder among coatings. It reduces the coefficient of friction and the tendency to cold welding.



#### AlTiN ALUMINIUM TITANIUM NITRIDE COATING

The high hardness of this layer in combination with the oxidation resistance at high temperatures enables demanding cutting tasks, at which extreme temperatures occur both at the cutting edges as well as through outgoing chips. The coating can therefore be used with minimum lubrication or even for dry processing.

Did you know? On our GSR blog you will find a lot of useful information about our tools!

[www.gewindeaufschneider.de](http://www.gewindeaufschneider.de)

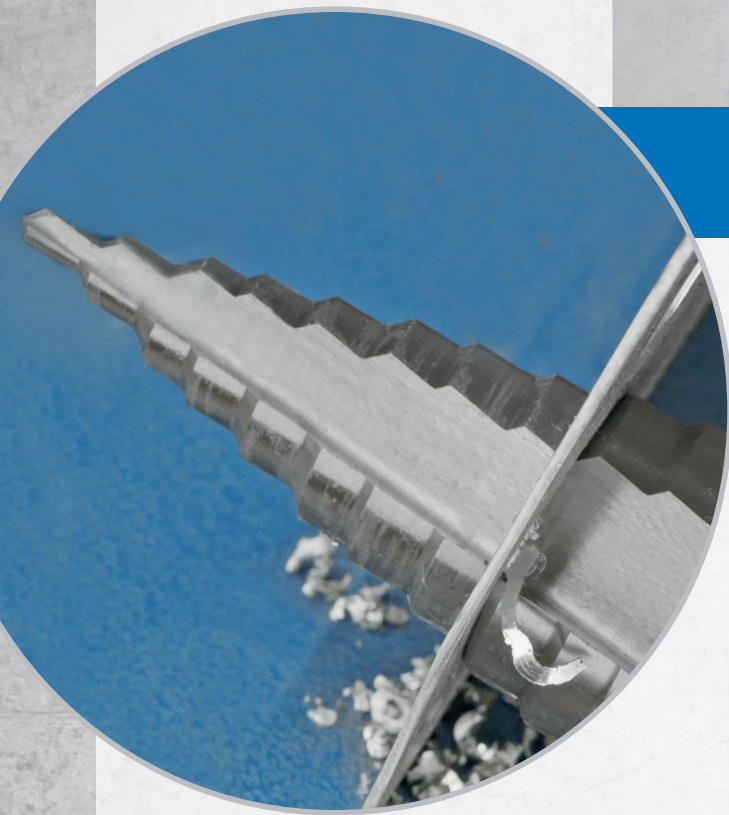
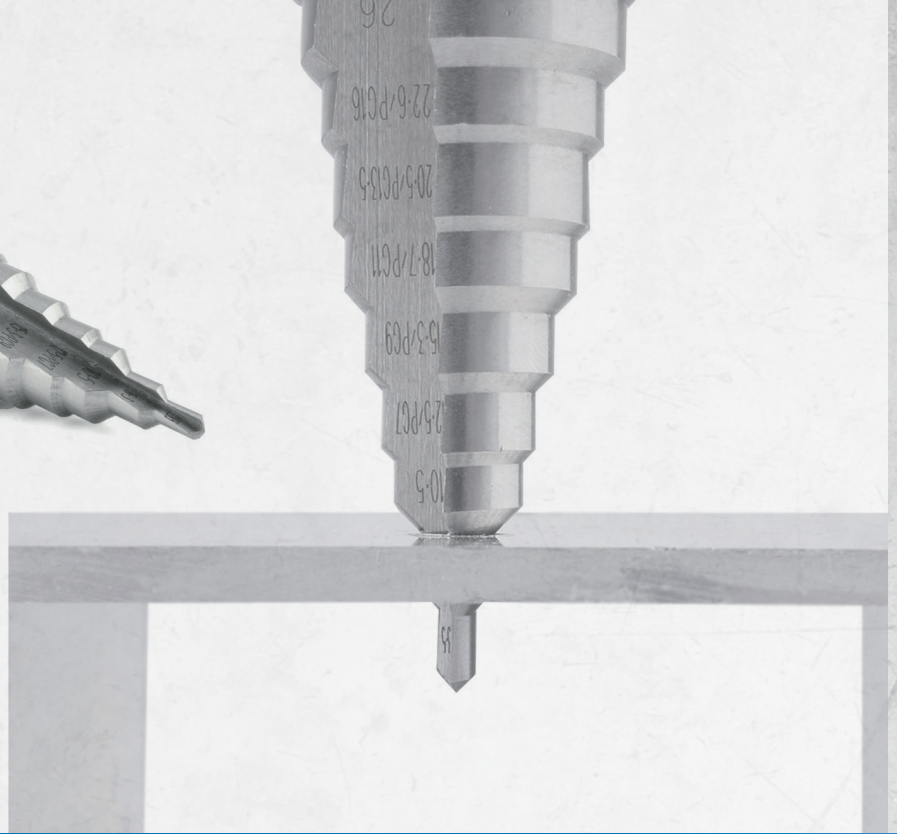
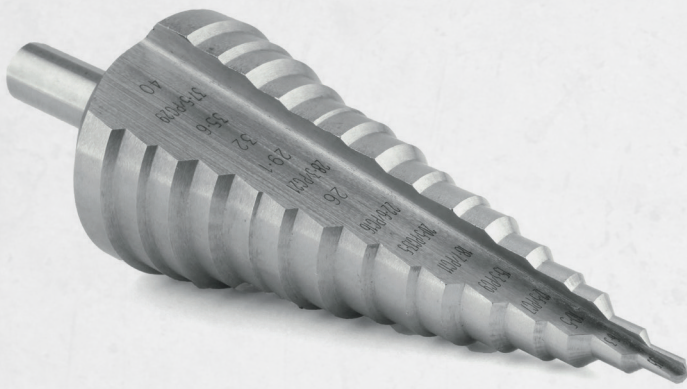
#### CBN CBN GROUND

CBN is an abbreviation and stands for Cubic Boron Nitride. It is the second hardest material after diamond, and consists of boron and nitrogen atoms with a cubic crystalline structure. By now, so-called CBN grinding wheels have prevailed, as they have some key advantages in processing HSS tools. This is caused by their high temperature stability and a low coefficient of friction. CBN ground tools therefore have a higher surface quality than conventionally machined tools.

#### STEP DIAMETER

d1 mm	steps mm
4-12	4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12
4-20	4 / 6 / 8 / 10 / 12 / 14 / 16 / 18 / 20
6-30	6 / 8 / 10 / 12 / 14 / 16 / 18 / 20 / 22 / 24 / 26 / 28 / 30
6-36	6 / 9 / 12 / 15 / 18 / 21 / 24 / 27 / 30 / 33 / 36
12-20	12 / 13 / 14 / 15 / 16 / 17 / 18 / 19 / 20
20-30	20 / 21 / 22 / 23 / 24 / 25 / 26 / 27 / 28 / 29 / 30
30-40	30 / 31 / 32 / 33 / 34 / 35 / 36 / 37 / 38 / 39 / 40
40-50	40 / 41 / 42 / 43 / 44 / 45 / 46 / 47 / 48 / 49 / 50
50-60	50 / 51 / 52 / 53 / 54 / 55 / 56 / 57 / 58 / 59 / 60





## GSR professional electric step drills

### STEP DIAMETERS

d1 mm	steps mm
3,5-40	3,5 / 6,3 / 10,5 / 12,5 PG7 / 15,3 PG9 / 18,7 PG11 / 20,5 PG13,5 / 22,6 PG16 / 26 / 28,3 PG21 / 29,1 / 32 / 35,6 / 37,5 PG29 / 40

Quality step drills from GSR with a straight flute and three-surface-shank for armoured conduit threads (PG). For burr-free drilling and reaming of sheet metals, pipes and profiles. Especially for cable glands (incl. PG dimensions).

Perfectly suitable for processing cable junction boxes, installation boxes, distributor housings, house connection boxes, terminal boxes, switch cabinets, switching and control devices. Drilling of construction steel, non-ferrous metals, general steels, chromium-nickel steel. For material up to 4 mm thickness, shank 10 mm

[WWW.GSR-GERMANY.DE](http://WWW.GSR-GERMANY.DE)



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Precision is in the details. Since 1889.

**THREADING TOOLS**  
Gustav Stursberg