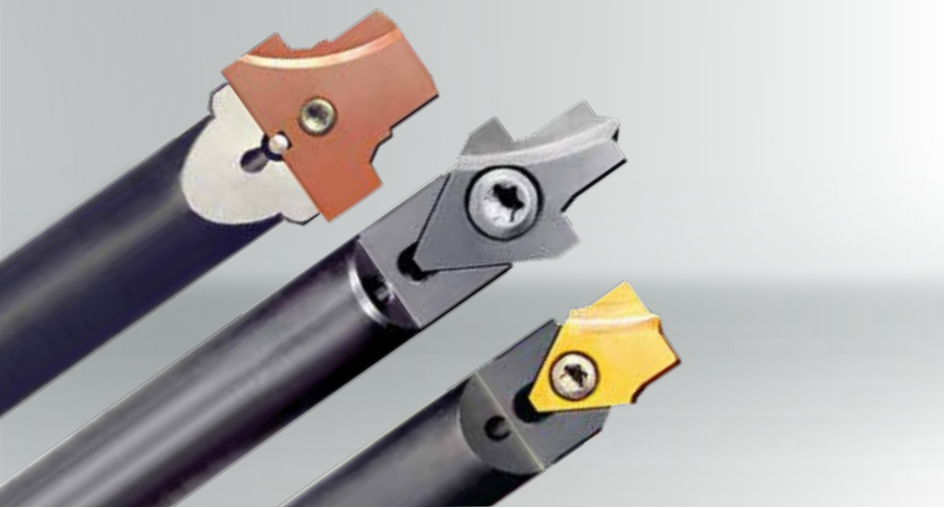
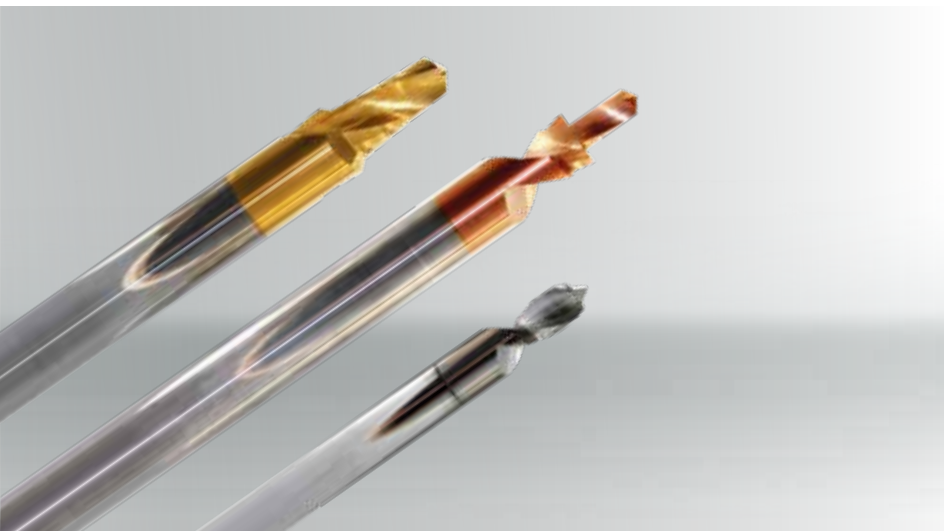


Form Drilling



Form drilling with insertable form tools



Form Drilling with solid carbide drills

Schwanog PWP and PWP-D-System:

Form drilling with insertable form tools for significant cost reductions!



Technical facts:

- ❑ Insertable inserts up to 28 mm in width
- ❑ For use on any lathes, milling and drilling centers

Repeatability:

- ❑ < 0,02 mm

Your benefits:

- ❑ Part cost reduction by up to 40 %
- ❑ Elimination of set-up time during tool changeovers
- ❑ Distinctly lower coating costs, due to only insert being coated

With its insertable form drill system, Schwanog offers an equally efficient and cost-saving solution, because only the carbide insert is ground and not the entire solid carbide drill. With the insertable form drill which is individually ground according to a customer drawing a minimum tolerance of $\geq \pm 0.02$ mm can be achieved.

To complement the PWP- System, the PWP-D-System was added to our line of products. This system offers wider inserts, achieving drill diameter up to $\varnothing 28$ mm.

The Schwanog form drill system can be applied to any lathe, milling and drilling center.

The strength of the insertable system is also particularly evident when it comes to tool trials as inserts are available in various carbide grades and the otherwise separate setting after the tool changeover, is, due to the insert holder staying in the machine, completely eliminated and makes such tests significantly more efficient compared to a solid carbide drill.

The coating process as well is significantly cheaper because instead of the solid carbide drill, only the proportionally smaller insertable drill needs to be coated. Inserts are also cheaper compared to solid carbide.

**Form drilling with Schwanog.
Wider. More efficient. Cost-effective.**

Really Solid. Full Power. Full Competency.

Drilling with solid carbide drills from Schwanog!



DRILLING WITH SOLID CARBIDE DRILLS FROM SCHWANOG!

With the new solid carbide drills, Schwanog is closing a gap in the product range of high efficient drill applications.

The new Schwanog solid carbide drills are available in all common carbide grades and coatings. As with our insertable form drills the profiles of our solid carbide drills are ground specifically to customer requirements.

Technical facts:

- Solid carbide drills available in almost all desired designs and coatings

Precision:

- All precision parameters can be achieved reliably and checked by highly advanced measurement equipment

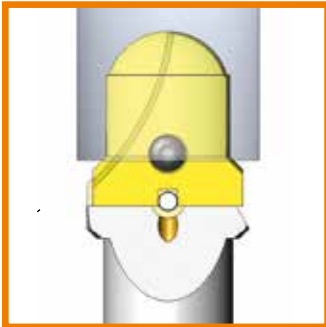
Your benefits:

- Effective immediately, we can offer a complete range of solid and insertable form drills
- Depending on the requirements, we are able to realize the perfect tooling solution for you to achieve maximum efficiency and precision

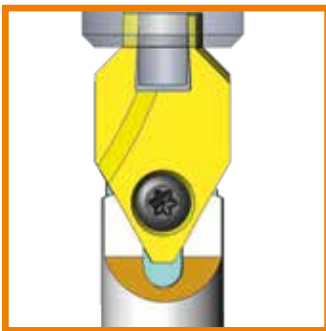
Form drilling with insertable drills and solid carbide drills.

Applications:

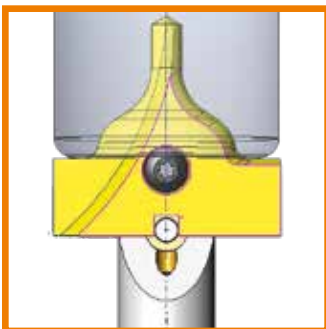
FORM DRILLING WITH INSERTABLE DRILLS



Drilling of spherical shape with PWP insert



Manufacture of face groove with PWP insert

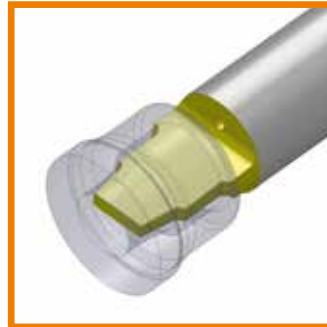


Form drilling with PWP-D insert of complex trumpet mouth piece made from brass

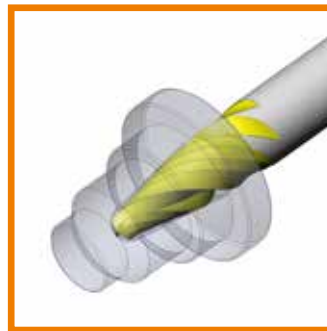


Drilling of taper with PWP insert

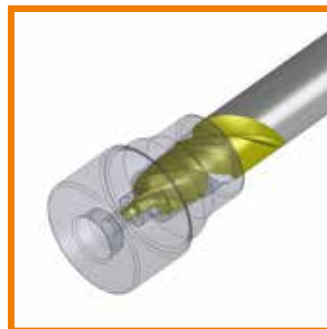
FORM DRILLING WITH SOLID CARBIDE DRILLS



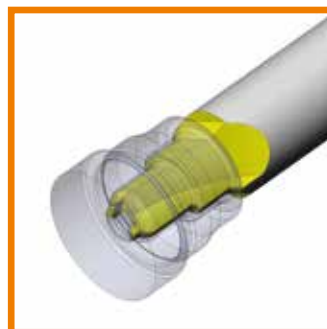
Spade drill for machining brass



Drilling of taper with spiral shaped drill



Spiral shaped form drill



Form drill for automotive parts

According to your requirements:

Form drilling with insertable drills and solid carbide drills!



With the introduction of solid carbide drills, Schwanog offers both solutions from a single, competent source as a full-range supplier.

In cases where drilling tolerances $\geq \pm 0.02$ mm are sufficient, Schwanog recommends form drilling with insertable tools. The separate setting during tool changeovers is eliminated and the coating costs is significant lower when compared to a solid carbide drill.

If smaller tolerances or larger drilling depths are required, Schwanog offers solid carbide form drills, ground individually according to drawing in all sizes, specifications and materials.

Simply send us your part drawing and we will recommend the best technological and economical solution.

Our competent technical sales staff in the company and in field service are at your disposal.

**Form drilling with Schwanog:
Definitely the fastest way to part cost reduction!**

Insertable tooling systems



OD Grooving



OD Grooving for rotary transfer machines



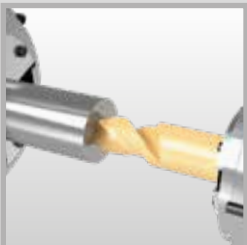
ID Grooving



ID Grooving and turning with WSI



Form drilling



Solid Carbide drills



Shave Tools



Skiving Tools



Polygon turning



Broaching of Serrations



OD Whirling





ID Whirling Tools (Thread Mills)




Parts selector

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