

Rottweil, 27th May 2021

Special tools for machining plastics

It takes a lot of experience and the right tools to achieve optimum results when machining plastics. Similar to the processing of different metals, the special features of the individual materials must be considered when processing different plastics in order to determine the optimal cutting tools and parameters. The German company Dieterle has been working with leading manufacturers of plastic turned parts for decades in order to develop a tool system for their special requirements. As only supplier on the market, Dieterle offers a special tool system for machining plastics as standard tools from stock. This unique system offers many advantages for machining plastics compared to convenient tools:

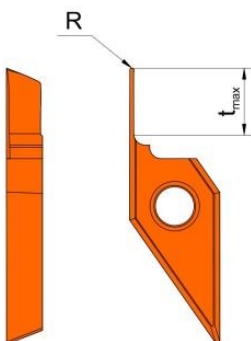
- Extremely sharp cutting edges
- Very good chip control
- Individual design of the blade and cutting geometry
- Especially polished sections for thermosetting plastics, thermoplasts, elastomers, rubber, PTFE, etc. (e.g. to avoid burrs)
- Chiplessly parting off elastomers

Dieterle's tool system for machining plastics has recently been compiled in a new catalog, which includes helpful information such as cutting data recommendations.

On www.dieterle-tools.de/en/shop/plastic-machining-tools/ the tools can be easily selected and a quote can conveniently be requested online.

New tools complement the program:

KP-VCGT.. Interchangeable inserts with SDAC-KP-90.. tool holder: Ideally suited to realize finest plastic contours, also behind the shoulder

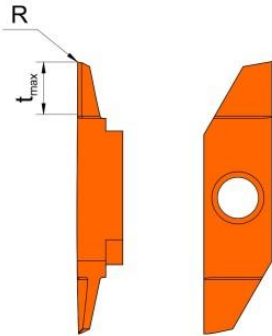


The new KP-VCGT interchangeable inserts have been specially developed for grooving, turning and copy turning of plastics. Their highly positive and peripherally ground geometry with polished rake angle guarantees a very aggressive yet soft cut. Due to their slim geometry, these indexable inserts are ideally suited for producing the finest contours, even behind the shoulder. The new KP-VCGT indexable inserts are available in the sizes VCGT-0702.. and VCGT-1303.. with R0.2 and R0.4 and a grooving depth of up to 5.5 mm. The matching tool holder SDAC-KP-90.. ensures a turning operation with an angle of 90° to the turning axis. The SDAC-KP-90 tool holder is available in the usual shank sizes.





**SALP-T06-KP.. Inserts with SSXA-T06.. tool holder:
Ideally suited for reliably machining soft plastics on Swiss type automatic lathes**



The newly developed SALP-T06-KP geometry is ideal for all very soft plastics, elastomers and rubber-elastic polymers. The razor-sharp cutting edge ensures very good chip control, so that hardly any cutting forces occur and no thermal deformation occurs. Due to the optimal chip removal, overhead machining is no longer necessary. The cutting edges are polished to prevent sticking to the cutting edge. The matching tool holder SSXA-T06 is available in the usual shank sizes, also with internal cooling or as a tool holder with subspindle in a tapered design. The proven SSXA system is the optimum choice for machining small diameters on Swiss type automatic lathes. A variety of different inserts make the SSXA system flexible for grooving and long turning, parting

off, thread chasing, and now also for machining plastics. Special tools based on the SSXA system can be flexibly manufactured according to customer specifications.

For the machining of plastics, especially materials with composites, PCD-tipped or diamond-coated tools are often required. In order to offer the optimal solutions in this regard, Dieterle has been working successfully with the leading coating manufacturers for many years.

Further information is available at <https://www.dieterle-tools.de/en/industries/plastics-technology/>

Contact:

Otto Dieterle Spezialwerkzeuge GmbH
Predigerstr. 56
78628 Rottweil
Tel.: +49 (0) 741 94205 0
info@dieterle-tools.com
www.dieterle-tools.com

