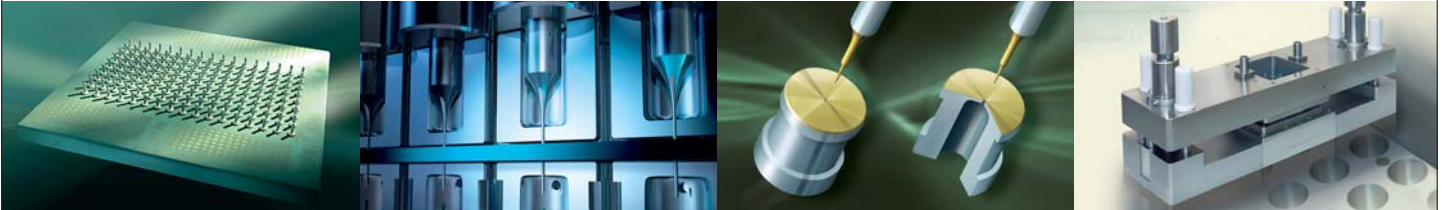




CERAMIC PUNCHING COMPONENTS



ENG



GROZ-BECKERT®

PRECISION MANUFACTURING HAS TOP PRIORITY



Die sets for micro perforation of foils

Groz-Beckert is available to you as a full-service supplier for the development and construction of die sets.

Your goals are the starting point for our development work and tool construction. Both complete die systems and replacement elements are included in our range.

We develop solutions in co-operation with our clients and work consistently towards improving existing components.

Punches and bushings

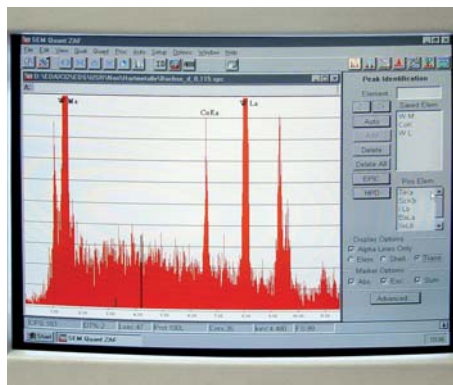
Groz-Beckert components for punching ceramic foils are used in many areas. Ceramic punching components are available for single punch units and complex punching systems with more than 200 punch positions.

Our range of products includes ceramic punching components for machines and tools of all kinds.

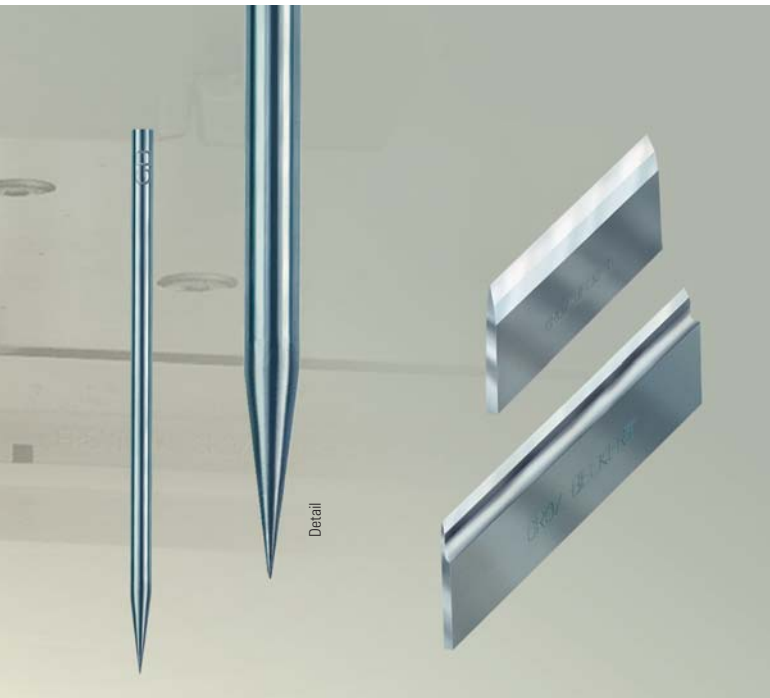
Special shape punches

As well as classic round punches, Groz-Beckert also manufactures ceramic punching components for special shapes. Thanks to our state-of-the-art production technology, a huge diversity of shapes can be produced.

QUALITY IS THE MEASURE OF OUR WORK



WE HAVE THE LATEST LABORATORY EQUIPMENT FOR ANALYSIS.

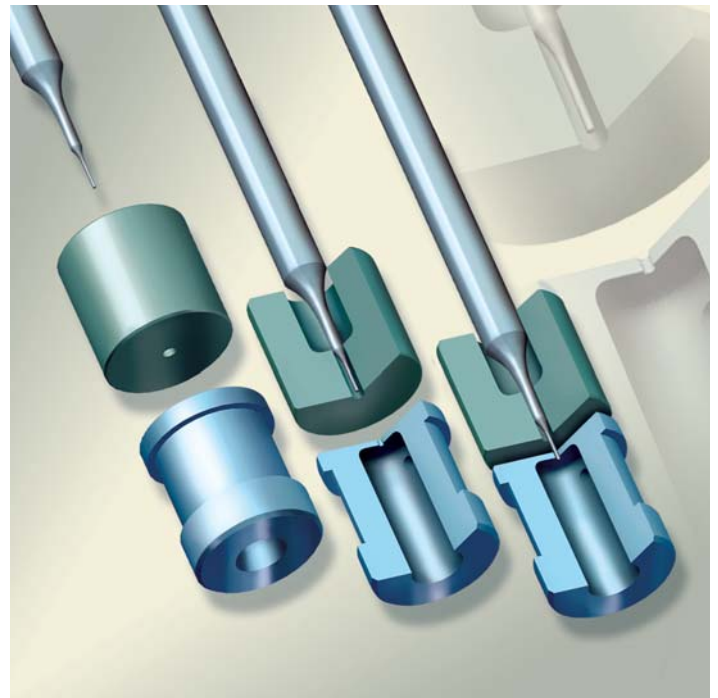


Ejector pins

Groz-Beckert precision for die bonding. Our ejector pins are distinguished by a long service life, precision and their high surface quality.

Precision cutting blades

Blades for cutting unfired ceramics are subject to very high standards. Groz-Beckert produces cutters with extremely high precision to suit your requirements.



Groz-Beckert – that subtle difference

Groz-Beckert components for punching are distinguished by the exceptional quality of their ground surfaces and absolute accuracy of dimensions and shape.

A suitable choice of materials ensures that optimum wear resistance is achieved. Ceramic punching components are measured fully with 3D co-ordinate measuring machines, measurement projectors or special-purpose measuring devices.



Groz-Beckert is certified per ISO 9001 since 1995 and environment certified per 14001 since 2000.

As a manufacturer of high-quality products, we rely on no-compromise quality management. For this reason, quality starts with us long before production actually begins – it starts in the choice of materials that are to be worked. Only selected materials that are specifically defined by us are used.

For punches and bushings, we only use first-class carbides from certified suppliers.



So that high-quality and sensitive parts of this kind reach our customers undamaged, packaging of an equally high quality is essential.



© 02/2006 GROZ-BECKERT KG

QUALITY INSPIRES TRUST

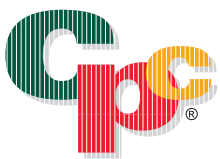
Since 1852 we have manufactured precision parts in large numbers at our main works in Albstadt. Perfecting our products and production processes on an ongoing basis and solving innumerable problems in the most complicated fields of technology is what our company and services are all about.

Almost 7,500 employees in R&D, production, machine construction and sales all have a single goal: "To give our customers

optimum support in the form of continuously improved products and perfect service".

With our world-wide sales network, made up of our own affiliated companies and trustworthy partners, we offer you top service and fast availability.

Our CPC team is at your service at all times to help with any questions you may have.



GROZ-BECKERT KG
PO Box 10 02 49
72423 Albstadt, Germany
Phone +49 7431 10-2607
Fax +49 7431 10-2088
contact@groz-beckert.com
www.groz-beckert.com

CPC® is a registered trademark of the
Groz-Beckert KG