





#### Benefit from the experience of professionals

Menzerna has been setting standards in the development and production of polishing compounds since 1888. Founded by Friedrich Menzer in Pforzheim, the company was once a manufacturer of polishing compounds for the local jewellery industry.

Dr. Stephan Dech Eckhard Herwig

Rudi Messmer

Director Research & Development

Today, Menzerna is an innovative, medium-sized industrial company which operates all over the world. Backed by the experience of a century, we use the latest methods to develop high-quality and innovative polishing compounds. Our customers are professionals in trade and industry who have the highest expectations of polished surfaces.

We are a strong partner to the processing industry and, with hundreds of recipes and a comprehensive range of services, cover all areas of industrial polishing.



#### German engineering for demanding applications

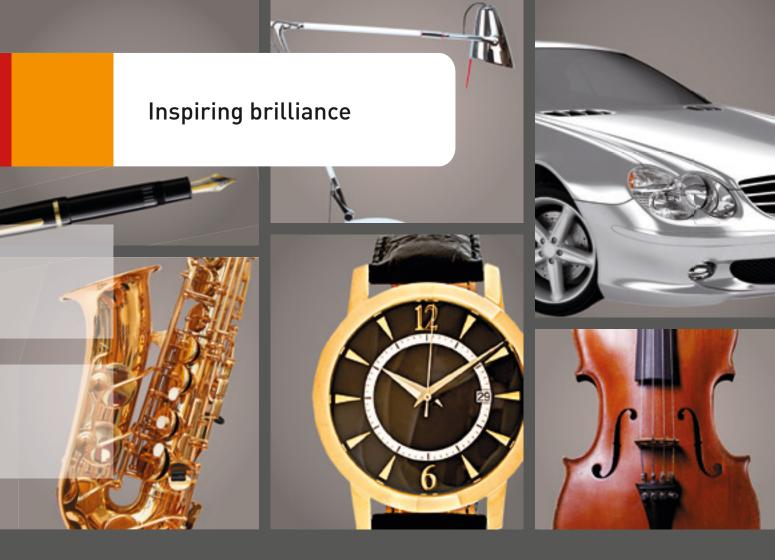
At Menzerna we understand that compound formulation and application knowledge are equally important. We are passionate to only deliver a premium product and to distribute it worldwide. This emphasis on superior quality guarantees to our clients superior polished surfaces.

Menzerna formulations are designed to

perform whether applied by hand, with power tools or in a fully automatic fashion. Menzerna compounds are used where perfect and fast polishing is required.







#### Polishing engenders beauty and functionality

Polished surfaces are not only beautiful, but also satisfy the highest demands, if minimal surface roughness is required. Polishing enhances the functionality and the esthetic value of each item. Flatware, jewelry or musical instruments only show their real beauty after polishing. At that point they become luxury items. Chrome plated sanitary fittings stand out, if properly polished before electroplating. Precison parts tolerate only a minimal surface roughness, and imperfections on clearcoats are best removed with a suitable polishing compound.

At Menzerna we know which materials make the right formulation for any type of surface.







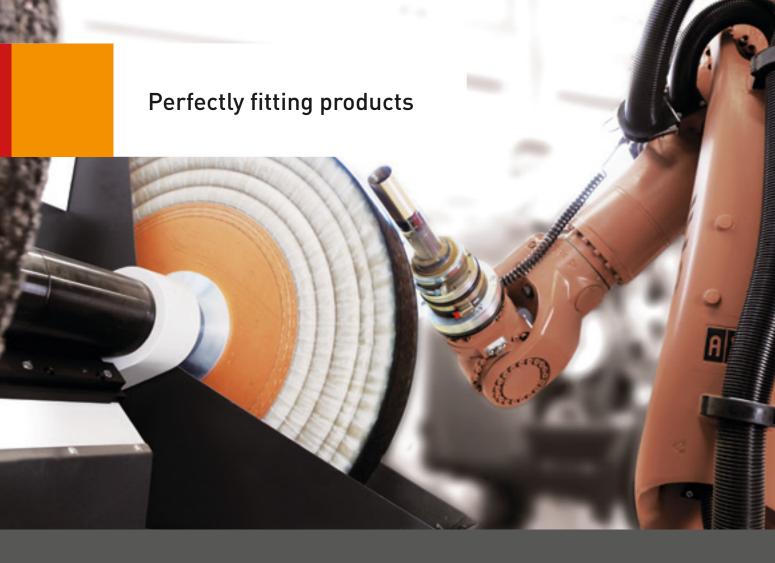






# The number of applications is enormous. Our aspiration is to find new ones every day.

- Automotive Clearcoats
- Brass Instruments
- Eye Glass Frames
- Flatware
- Furniture
- Gear Parts
- Jewelry
- Medical Instruments
- Metal Fittings
- Ornaments
- Plexiglas
- Sanitary Fittings
- String Instruments
- Watches
- Writing Instruments



## Polishing Emulsions

#### Economy with stable polishing processes

Our manufacturing clients count on the dependability of Menzerna products. Cost and quality of their end products strongly depend on the polishing emulsions used. Manufacturers of cooking ware, auto parts, furniture or sanitary fittings rely on stable and cost efficient polishing process. Each Menzerna emulsion has run through a multi stage development process before it is offered to our customers.

The formulations are developed by a team of chemists and thoroughly tested in our facilities. Products will only be released if they reach the required score in abrasion, gloss, compound and tool consumption and degreasing qualities. Our objective is to provide highest surface quality at minimal consumption and in the shortest cycle time possible.

Our attention to detail is to your advantage. We keep Menzerna products state-of-the-art to keep our clients competitive.





## Solid Compounds

#### Harmonious composition for perfect detail

Small lot sizes and valuables are best polished by hand. Manual polishing with buffs require experience and a sense for the item being polished. The polisher is part of the process. The other parameters are pressure, polishing time and the amount of compound used. Any variation in the paste is immediately noted. Consistently high quality is the hallmark of Menzerna products and made us world leaders in solid compounds. Our range of compounds covers all materials and polishing steps. Menzerna pastes are carefully tuned to one another and to the treated surface. Menzerna-Compounds are mixed with a vacuum process and filled at high temperature and under high pressure.

This "know-how" guarantees the Menzerna-typical homogenious quality and allows for the production of very dry pastes. Menzerna-Innovation does not end with the formulation. We also think about packaging. Solid Compounds come in color-coded cartons. The easy to read color-code helps to make sure the right compound is used for right application.





## Clearcoat Repair

#### Innovative products for a rapid shine

Coated surfaces only come to their own, with a deep mirror finish. Small imperfections and overspray from the paint process as well as areas that show wear and tear need to be eliminated. The goal is to do this quickly without any visible residues. For that, Menzerna offers a complete system of liquid polishing compounds and accessories. We are working closely with clearcoat manufacturers for the auto industry. From that collaboration we developed polishing compounds that meet the high

standards of automobile OEM customers. Every imperfection in an improperly polished surface shows up under the light and the critical eye of specialists in the business. We live up to these high standards, even exceed them. We continuously test new polishing minerals and additives to keep up with new clearcoats.

This process does not leave much room for error.
On one hand polishing compounds need to be abrasive to guarantee a short polishing process.
On the other hand these materials also need to deliver a brilliant luster without any micro scratches, haze or holograms. Our engineers successfully master this balancing act. Industry professionals agree - and prefer Menzerna.





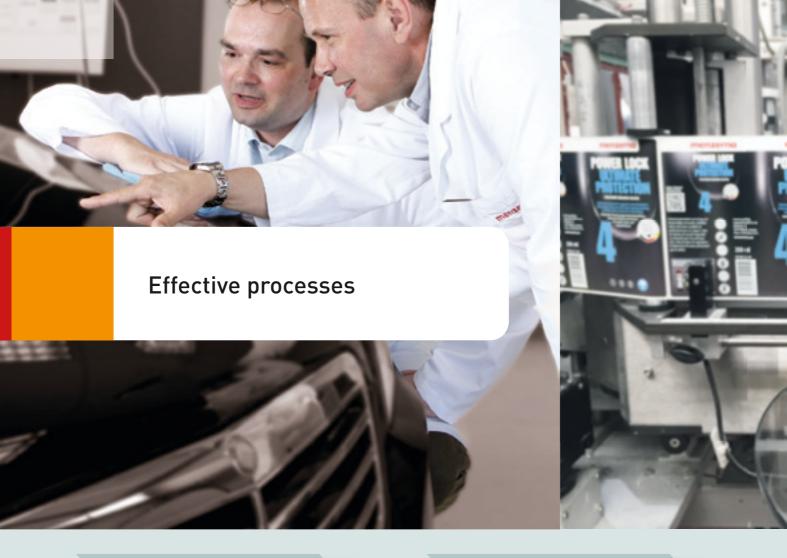
## Service, Training and Consulting

#### More knowledge thanks to our expertise

Several factors affect polishing results other than the compound used. Surface temperature, pressure variations and changing conditions of the polishing tools will greatly affect the process. Menzerna technicians offer support to the managers and operators of these complex processes. Here are some of the areas we cover:

- Trainings: Basic, advanced and customer specific training programs offer application know-how, and hone manual polishing skills. The Menzerna robot course focusses on programming and operating numerically controlled polishing machines. These trainings are designed for distributors as well as team leaders and operators.
- Expert Workshops: The goal of these workshops is to optimize polishing processes. In a kick-off meeting improvement potentials are identified and test designs determined. The results will be presented to the project sponsors in gateway meetings. Attendees are technical managers and specialists from the customers' as well as experts on polishing tools and machines.

- Product and Process Development:
  - The Menzerna "Tech Academy" allows to operate polishing processes under realistic conditions in a controlled environment. This gives us the opportunity to test compounds, tools and abrasives and to fine tune the system for optimal results. The "Tech Academy" is also available to third parties.
- **Consulting:** Our application engineers stand by for on-site support, to optimize polishing processes and transfer technical skills.



#### FORMULATION

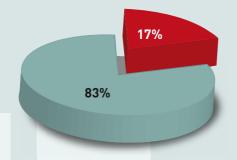
#### A wealth of innovative ideas

Customer oriented innovation and rapid development are part of our core capabilities.

At Menzerna's "Tech-Academy", a modern development and testing facility, formulation and application go hand in hand. Each formulation is tested under realistic conditions and polished surfaces can be examined with optoelectronic measurement devices. Every product that leaves our lab has proven its reliability and quality and is designed to live up and exceed all expectations.

We think things through. This is the reason why we include subsequent stages like degreasing and electroplating in our test programs. The advantages for Menzerna clients are clear: perfectly tuned formulations and processes, cost efficiency and superior surface quality.

17 % of revenues generated by products younger than 5 years. New products as percentage of revenues.



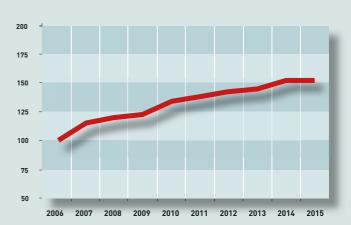
#### PRODUCTION

#### Efficiency means better productivity

Many characteristics of our compounds only develop fully in the manufacturing process. Our knowledge of mechanical process engineering and process control belongs to the capabilities that make Menzerna so unique. Fine grinding, homogenizing, viscosity control as well as filling and packaging are only a few of the strengths that make us winners in the industry. Striking the balance between efficiency and diversity is one of the challenges we are dealing with every day.

Steady productivity growth due to continuous investment in operational excellence

Productivity 2006-2015, Index, 2006 = 100





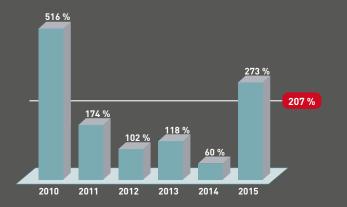
### CUSTOMER SERVICE

All this is possible with highly efficient warehousing, automated material feeding and filling systems and mixers of various sizes. The "Menzerna Daily Management System" monitors quality, cost, time and safety on a daily basis. You can count on it.

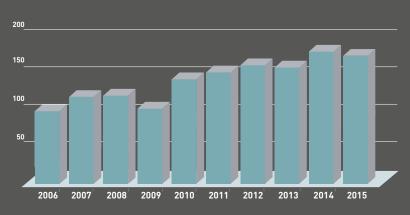
#### Local expertise thanks to global presence

We are proud to offer our clients uncompromising support where ever they are. Menzerna has a world-wide network of subsidiaries and dealers. Each outlet offers a product program that caters to the regional market. Our distributors have access to our central application engineering, training programs and marketing support. High performance products and logistics in combination with comprehensive dealer support create a win-win situation.

#### Continuous investment in leading edge technology Capital expendures as percentage of amortization



## Longterm growth through customer orientation and innovation Revenues 2006-2015, Index, 2006=100





#### menzerna polishing compounds

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