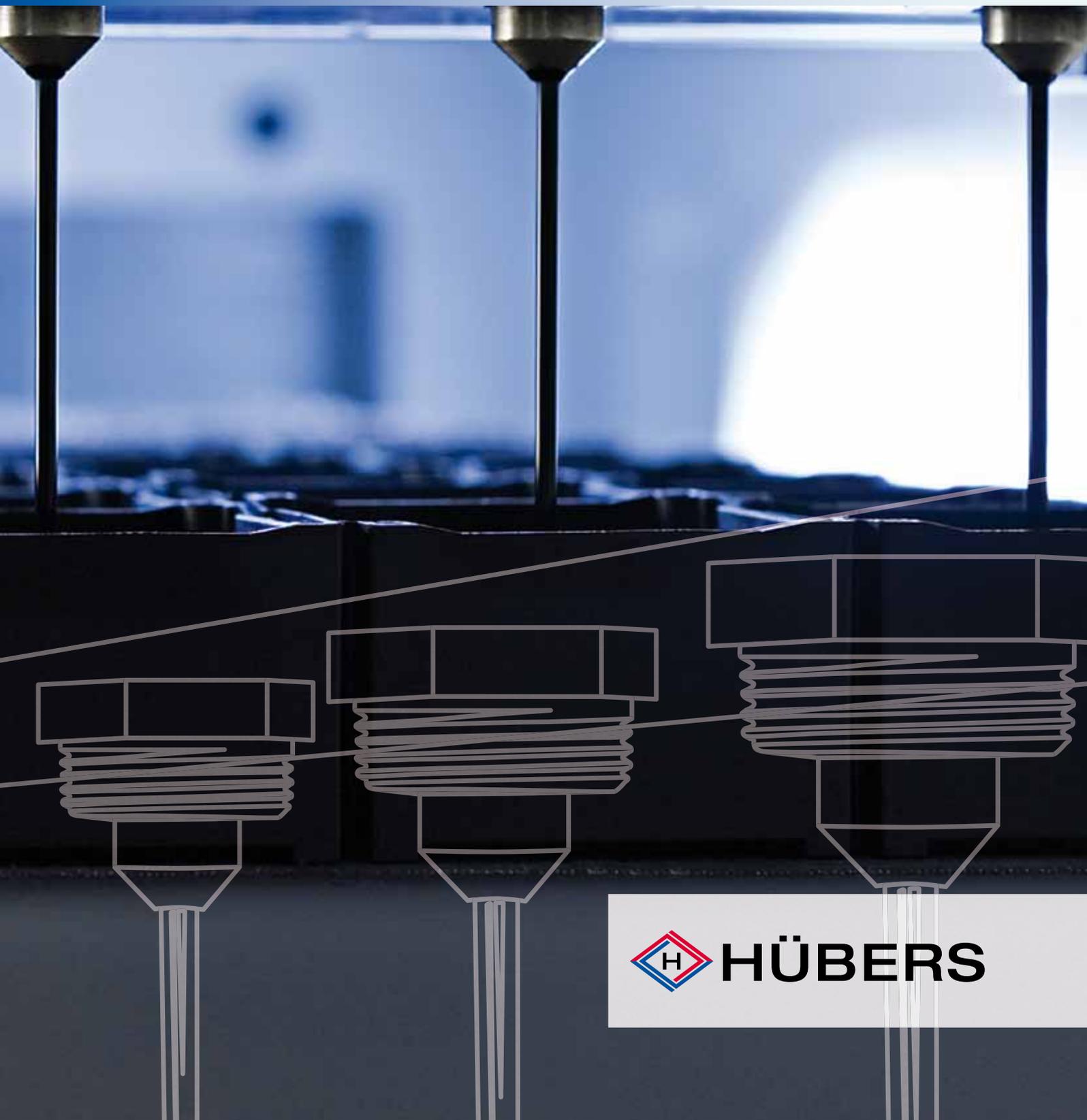


Resin Casting and Impregnating Technology from the Expert



 **HÜBERS**



Quality is our benchmark

HÜBERS is one of the world's leading process engineering companies for the production of resin castings and impregnation of technical components. Systems and process technology from Bocholt are used worldwide in the electrical and electronics industry, automobile industry, medical technology and special applications.

Since 1937 we have been providing maximum efficiency and 100 per cent quality for every production task – with our proven systems or customised new developments from our Technical Development Centre.



Flexibility at every stage

Are you just beginning to work in the casting field and you wish to keep your start-up costs as low as possible? Or maybe you are planning to modernise or expand your existing plant? This does not pose any problems with our systems and know-how.

Not only are our systems optimised for production and flexible in relation to their application – they can also be expanded at any time. **Changes to products and processes** can be implemented **just as easily** as major changes to batch sizes – **giving you scope for planning and growth**. Expansion of plant and equipment not manufactured by HÜBERS is also an option.

Your Company grows – HÜBERS' systems grow with you.



Our patents

Examples of the many patents granted to HÜBERS

- Metering screw
- Multi-casting nozzle
- Electronic metering pump
- Electronic metering drive for multi-nozzles
- Ceramic metering pump
- Pressure-curing oven
- Continuous material preparation and compounding
- Vacuum filling and impregnating of high-performance capacitors





Our quality

- Ongoing quality assurance during the entire manufacturing process
- High percentage of in-house manufacturing for all system components specific for the particular process
- Suppliers of high repute with worldwide service networks for bought-in parts
- In-house planning and elaboration of customised system solutions, software and the man-machine interface
- Prior to delivery: complete system assembly at HÜBERS and stringent functional testing in accordance with your production conditions
- Highly flexible production planning guarantees excellent reliability in terms of commissioning dates



Perfection without compromise

We develop our systems to the most stringent standards. We are never content merely to know that a system is operating faultlessly. **We optimise the processes until everything is perfect.**

This means minimising your total production costs by **reducing labour costs** during system operation, planning **short workflows** and achieving processing that is so spotless as to virtually eliminate cleaning costs. As a result of our approach we are also able to **reduce material consumption, servicing and wear** to the **absolute minimum.**

At the same time, we always have an eye on **maximising production output** and achieving **optimum reliability** and **flexibility** with our systems. Potential **sources of faults** due to operating or mixing errors are **eliminated** by automating sensitive areas.

As you can see, we consider all eventualities, e.g. standstill periods during breaks and at weekends as well as three-shift operation, meaning **uninterrupted operation is always guaranteed.**

This all-inclusive optimisation process also has a double effect on the **protection of the environment and natural resources**, a topic that is becoming increasingly important – especially at the present time.

Your benefit: maximisation of economical efficiency.





Our scope of services

- Development and testing of new technologies
- Applications to suit your individual requirements
- Proprietary design, assembly and programming
- Test runs under real-life conditions
- 24h service hotline and online quality control
- Comprehensive technical documentation and practice-oriented operating instructions
- Direct access to our Technical Development Centre in cooperation with our development engineers
- Training and instruction
- Flexibility and speed of spare parts supply

We are HÜBERS!

We – that means all of us – from employees to engineering managers, from creative heads responsible for developing new system ideas to trainees. We stand out from the crowd due to our **consistent quality consciousness**, personal responsibility, great motivation and our **high level of qualifications**. That's how we can do justice to our self-imposed benchmark of **quality and perfection**. After all, we firmly believe that the quality of the system determines the quality of the components that are produced on it.

Your benefit – we always do our very best for you.

Advancing into new dimensions

Your wishes and **individual requirements** are our standard. We focus on your specifications and give you comprehensive advice on all technical issues.

In consultation with you, we review all options for the realisation of your project – whether new plant, modernisation or expansion **using new, more efficient components**. We consider ourselves to be your partner – from planning to implementation – and we show you new market potential and production solutions.

Individual advice just for you – that's HÜBERS.





A to Z and everything in-between

Our services literally start at the very beginning. You can control your product quality from the outset. Beginning with the preparation of the required materials, for example, we offer you our **storage and conveyor systems** and the **appropriate material compounding and preparation systems**.

In the subsequent production process, our sophisticated **mixing and metering components** for **atmospheric or vacuum casting** as well as **degassing equipment** come into use. **Casting chambers, mouldings** and finally **driers, ovens and curing systems** complete the range.

Applications extend from the **laboratory** up to **fully automatic production lines** with free programmable process control and online quality control.

All “cast of a piece” or individual pieces – according to your requirements.

Our processes

- Casting and impregnating
 - Atmospheric, vacuum, vacuum-pressure and pressure gelation
 - Single and multi-component systems
 - Single components and complete systems
- = efficient production of electrical and electronic components of the highest quality



Precision in mixing & metering

Our mixing and metering systems have many distinguishing features. Whether large, compact or micro-systems, **all can be expanded and used in a number of different ways.** They can be converted from **vacuum to atmospheric casting** and facilitate a multi-stage process. All systems can be expanded for the purpose of **parallel pressure gelation and vacuum-pressure gelation**, supplied in each case from central preparation, mixing and metering systems. Adaptation to new products or processes can be done without much additional effort.

The **highest mixing quality and metering accuracy** are always achieved, together with an optimal degassing effect. **All material viscosities** and raw materials **can be used** – whether epoxy, polyester, polyurethane or silicone. Filled and abrasive casting resins can be processed.

Smallest metering quantities and absolutely void-free and drip-free castings guarantee perfect products. Our laboratory equipment and special facilities are at your disposal for the development and testing of new products and processes. The results obtained can be efficiently transferred to your production systems.

Flexible adaptation – always in accordance with your market and product situation.



Vacuum Mixing And Metering
Systems For The Electrical Industry



COMPACT Solutions



COMPACT Solutions



Micro-Casting Systems



Laboratory & Special Systems

Automatic Pressure Gelation



And much more...

As far as our development of new techniques is concerned, with **SVT® – Silicone Vacuum Treatment** we advanced into new territory as regards silicone processing. The result is absolutely **void-free and flash-free insulators** from the outset. All commonly used silicones can be processed.

In the field of **impregnation**, all processes are feasible – such as **vacuum/vacuum-overpressure or atmospheric impregnation**. You can choose from **compact systems, vacuum drying and impregnation systems**. Systems of all sizes are available.

Automatic Pressure Gelation (APG) and the associated **clamping machines** can be used in conjunction with a variety of resin casting systems as well as highly reactive epoxy, silicone or polyurethane components. Due to our sophisticated technology, **several clamping machines can be supplied by a single mixing and metering system**. Expansion options are available too.

Our **oven systems** take care of preheating, curing and gelation. You can choose from our **high-performance inline conveyor ovens, automatic batch ovens, stack ovens or serpentine conveyor ovens**.

For customers who **mix their own casting materials**, we recommend our **compounding and preparation systems** with **storage and conveying systems** for continuous or discontinuous processes. Our systems guarantee the **controlled delivery** of components in powder, granulated, liquid or highly viscous form.

Have we aroused your interest? Then please get in touch with us!



APG Clamping Machines



SVT® – Silicone Vacuum Treatment



Compounding & Preparation



Oven Systems



Impregnation Systems



What can we do for you?



We look forward to hearing from you. If you need more information on HÜBERS products and services, or have a specific request, just give us a call or send us an e-mail. We will respond immediately!

HÜBERS Verfahrenstechnik
Maschinenbau GmbH
Schlavenhorst 39
46395 Bocholt
Germany

Phone: +49 2871 281-0
Fax: +49 2871 281-1250

E-mail: info@huebers.de
www.huebers.de

