

# SOLUTIONS FOR FLUID TECHNOLOGY





### **PRODUCTION COMPANIES**











### **OWN SALES COMPANIES**





















### **CONTENT**

4	<b>E.HOLDING</b> Five fluid specialists for individual customer requirements
12	HBE GMBH Runs like a well-oiled machine – drive technology for oil hydraulics
16	VSE VOLUMENTECHNIK GMBH Precision, drop by drop – with pinpoint accuracy
20	<b>DST DAUERMAGNET-SYSTEMTECHNIK GMBH</b> Magnetically attractive – movement via magnetic torque transmission
24	<b>BEINLICH PUMPEN GMBH</b> Knowledge, experience and sector know-how – everything in the right dose
28	<b>OLEOTEC S.R.L.</b> Coping well under pressure – hydraulic components for pressure monitoring
32	<b>TRAINING AND CAREER</b> People, life, career – everything flows
34	SPONSORING AND SOCIAL COMMITMENT Engagement strengthens the region







## GLOBAL NETWORK

PRODUCTION SITES
IN GERMANY AND ITALY

**SALES PARTNERS WORLDWIDE** 

400

**EMPLOYEES WORLDWIDE** 

**PRODUCTION COMPANIES** 

6

**OWN SUBSIDIARIES** 

### FIVE FLUID SPECIALISTS FOR INDIVIDUAL CUSTOMER REQUIREMENTS

Hydraulic components, flow measurement technology, permanent magnetic systems and pump technology – the expansive Echterhage Holding group brings together a comprehensive product portfolio for fluid, drive, measurement and process technology. The companies that comprise e.holding develop and produce technically advanced products at three main sites: Neuenrade and Gevelsberg in Germany, and Cantello in Italy.

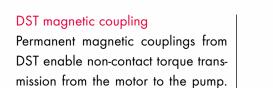
Our companies work together very closely. As a system supplier, we can deliver special solutions as a complete package. With our own design departments, the extensive knowledge and application-specific experience of our employees, and our established cooperation with our long-standing customers, we have the basis for continuous optimisation and for the successful development of new products. Short decision-making paths within the group of companies mean that we are flexible in our actions, so that we can react quickly to customer needs and new market requirements.

From chemical, to plastics and pharmaceutical industries, in food production, in the aviation, automotive and ship-building industries, our designs are used wherever there are media with challenging specifications. Our products can be found in processing plants, in hydraulic systems, in dosing systems, and in sectors which require high-precision monitoring and measurement technology, to name just a few examples.

As a globally acting company, we never stop working to embed and implement sustainable corporate principles and ethical values in our business practice. We consider it our duty to create and maintain a corporate culture in which observing and complying with codes of conduct and ethical values represents an operational framework for all our business activity.

8 e.holding





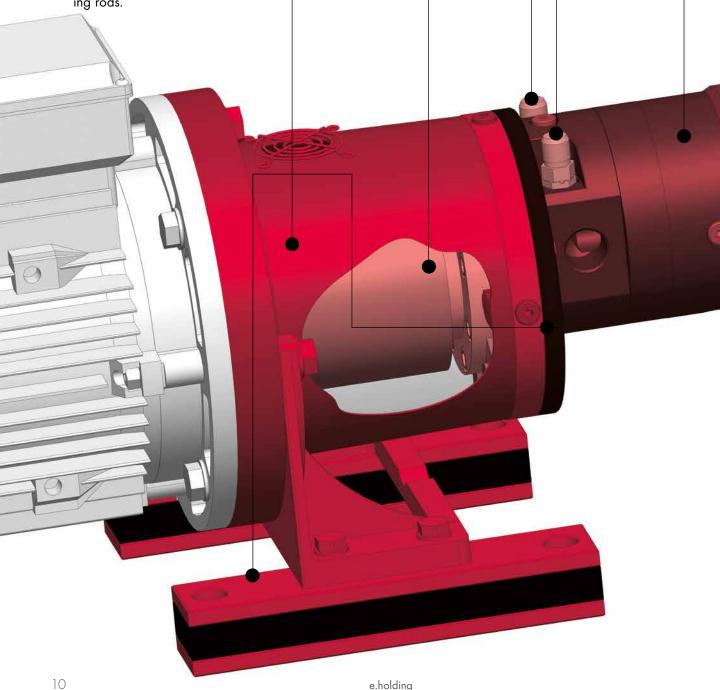
Leakage free, wear free, environmentally compliant.

### Oleotec test points

The check couplings from Oleotec provide safe and reliable measurement of the pressure at any desired point in the hydraulic system.

### HBE hydraulic components

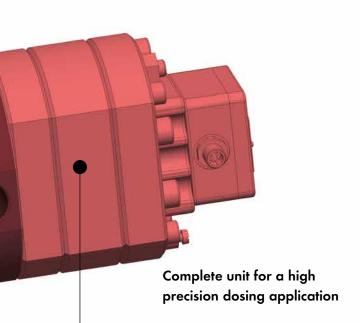
HBE offers a large range of accessories that are used in our complete systems, from rigid or damped bell housings to foot brackets and damping rods.



e.holding

### Beinlich external gear pump

The external gear pumps from Beinlich are suitable for precise dosing of media – liquid or viscous, with or without solids content, in large or small quantities.



#### VSE flow meter

The high-precision flow meters from VSE are used for precise measurement of the volume and flow of virtually any media that can be pumped. Optimised through various series and customer-specific solutions for a wide range of applications.

### **SOLUTIONS AS A SYSTEM**

Integrated solutions are a focal point of our product development, which is why we work closely together with our customers from the initial enquiry, through to the design and all the way to commissioning.

As a system supplier, we can provide comprehensive complete systems from our own products to meet the customer's specific needs. In this respect, it is the close cooperation within our group of companies that forms the basis for our work. This is based on many years of experience, leading to synergies that enables us to resolve complex tasks – so we can always achieve the best possible outcome for our customers.

Our in-house development and design departments work constantly to optimise our products and to develop new systems and solutions. This is partly achieved through collaboration with long-standing customers, which enables us to respond promptly to market requirements and offer outstanding efficiency.

e.holding



# HBE hydraulic components

HBE's success is based on highest technical quality standards, comprehensive advice and reliable customer service. With a history of more than 30 years on the market, HBE has established itself as one of the leading manufacturers of components for fluid and drive technology. In addition to steel and aluminium oil tanks, the company's portfolio includes shaft and flange couplings as well as an extensive range of top quality hydraulic components.







12 HBE GmbH







### Oil tanks

Steel, stainless steel and aluminium

### Tank accessories

Cleaning covers, level oil gauges, filler and breather filter, level switches, desiccant breathers

### Tank heaters

Cartridge heaters, tube screwed-in heaters and immersion heaters

### Bell housings

And accessories like foot flanges and damping elements

### Oil coolers

Oil-/air coolers, oil-/water coolers and bellhousings with oil cooler

### **SOFTEX®**

Elastic and no backlash shaft couplings

### STAREX®

Flexible couplings

### Torsional couplings

Flange couplings for Diesel engines and mounting plates

HBE GmbH 13

### RUNS LIKE A WELL-OILED MACHINE – DRIVE TECHNOLOGY FOR OIL HYDRAULICS

Set up as a three-man operation, HBE has developed into an international supplier of hydraulic components and oil tanks since its foundation in 1984. The subsequent years saw specialists from fluid technology merge together around the company to form Echterhage Holding.

Our love of craftsmanship binds things together. This applies not only to the manufacture of oil tanks in our in-house steel construction department, but also to our communication with our customers. In addition to an extensive selection of series-produced items that are always in stock, a large proportion of our products are manufactured to order. Customer-oriented flexibility when implementing special requests is a matter of course for us, and is a feature of HBE that our customers have come to depend on over many years. From accessories for all aspects of pump and motor use to a ready-to-fit hydraulic tank – we can supply the complete package thanks to our diverse product range.

Today, HBE products are used by well-known companies from all sectors of mechanical and plant engineering. They appreciate the short lead times that we can offer thanks to optimised warehousing, as well as the high quality.





14 HBE GmbH







As one of the leading manufacturers in the field of flow measurement technology, VSE produces precise flow meters. The high-tech products deliver highly accurate measurement results for virtually all pumpable media. VSE flow meters work reliably and safely for conveying applications, whether for water or high-viscosity adhesive media containing fillers. The customer can select from various materials such as titanium or bronze to find the right solution for the particular application. The VSE product range is rounded off with corresponding evaluation electronics and a comprehensive selection of accessories. VSE also develops custom solutions for individual customer orders.













#### Gear flow meter VSE EF ecoflow

The lightweight, cost-effective gear flow meters are suitable for low-pressure hydraulics and lubrication systems.

Flow range 0.05 to 150 l/min

Viscosity 1 to 10,000 cSt

### Gear flow meter VSI

Unbeatable performance, linearity and resolution for the most accurate measurement of viscous fluids.

Flow range 0.002 to 525 l/min

Viscosity 1 to 1,000,000 cSt

### Turbine flow meter VTR

Flow meters for extremely harsh application conditions in the oil, petrochemical and chemical industries.

Flow range 110 l/h to  $4,500 \text{ m}^3/\text{h}$ 

Viscosity 1 to 5 cSt

#### Gear flow meters VHM

Specifically for abrasive and poorly lubricating media. They are particularly suited to use in the paint industry owing to dead space optimisation.

Flow range 0.01 to 20 l/min

Viscosity 1 to 20,000 cSt

### Helical screw flow meter RS

Low-resistance, pulsation-free, high-precision measurement with minimal shear, very low pressure losses and excellent functionality based on intelligent sensor technology.

Flow range 0 to 3,000 l/min

Viscosity 1 to 1,000,000 cSt

### Special solutions

In close cooperation with the customer, VSE develops special solutions, using a wide range of materials and matched to the needs of the particular application.





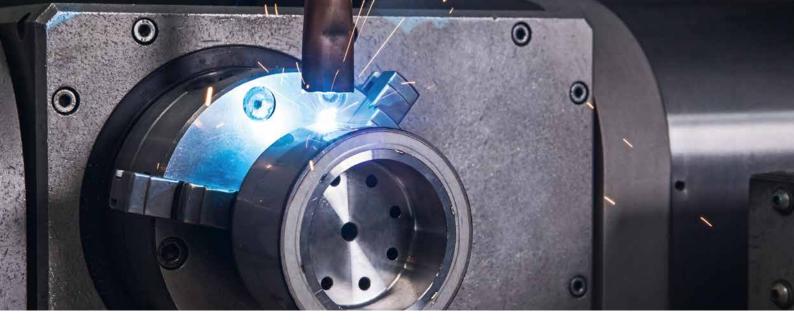
### PRECISION, DROP BY DROP – WITH PINPOINT ACCURACY

VSE is your ideal partner for reliable and exact measurement of all types of media. Our application expertise and our wide range of different flow meters will ensure that your product is perfectly matched to your needs.

To do this, we can make use of modular systems that are adapted by means of technical specifications to each individual order. This allows us to fulfil orders reliably in a short time frame. The majority of our output is tailored to customer requirements, thereby putting the handcraft back into industry. VSE won't sell you sensors "off the shelf" – precise craftsmanship is at the heart of our work. Each gearwheel and each electronic unit is fitted precisely by our employees. With our comprehensive service offering, we are always on hand to advise the customer well after delivery.











DST Dauermagnet-SystemTechnik was founded in 1991 on the basis of a simple but ingenious idea: by using magnets, the input and output sides can be hermetically separated owing to the non-contact transmission of torque, thereby eliminating leakage. The system is hermetically sealed from the environment by using the canister. This enables toxic, odorous or aggressive fluids to be conveyed safely. Today, the company is a market leader in the manufacture of permanent magnetic couplings. The product portfolio is rounded off by agitator drives and innovative canisters.











With performances between 1 and 1,200 Nm, the various standard series from DST cover the use on all current centrifugal and displacement pumps; furthermore, the company is just as effective in the development of special custom solutions, with performances ranging from 0.1 to >10,000 Nm.

#### Agitator drives

In addition to the permanent magnetic couplings, DST also offers stainless steel agitator drives, which are used primarily in pharmaceuticals, biotechnology and the food industry.

### Canisters

DST produces canisters of highest standard. The large range of products is available in various materials and covers a broad spectrum of applications.



### MAGNETICALLY ATTRACTIVE – MOVEMENT VIA MAGNETIC TORQUE TRANSMISSION

With our many years of experience in non-contact torque transmission, we are your first port of call for the design and development of customised solutions using magnetic couplings and agitator drives.

Comprehensive advice is a top priority for us in this context. We make sure that every enquiry is technically feasible, then produce a calculation and simulation. This means that we work with concrete data and designs right from the planning phase. With well over 1,000 magnet configurations, we are able to find the perfect solution for the perfect solutions for the diverse applications of our customers. Our employees provide excellent support for your projects with their extensive knowledge of applications and materials. In close collaboration with you, we create products for varied fields of use.

In addition to the chemical, pharmaceutical and food industry our magnetic couplings and agitator drives are also used in sectors such as biotechnology, hydraulics and petrochemicals. A wide selection of canisters is an additional benefit for our clients. We have the right solution for almost any requirement.









## **beinlich** pump systems

Over the course of more than 65 years, Beinlich Pumpen has developed from a traditional manufacturer of lubricant pumps to a supplier of highly specialised custom pumps. In addition to standard products that can be used flexibly, Beinlich relies on knowledge developed over many years from the handling of individual customer projects. Our flexibility allows us to react quickly to customer needs and new market requirements.













### Dosing pumps

The external gear pumps of series ZPD, ZPDA, DARTec® and ECO.pump, and the progressive cavity pump VISCO.pump® are suitable for dosing fluids and pastes having various viscosities, solids content, delivery amounts and environmental conditions.

### Delivery pumps

The ZPA external gear pumps and the especially quiet ZPI internal gear pumps are used to convey media in hydraulic systems, in cooling or heating circuits, for lubricating machines and, in particular, for bottling in a very wide range of industries.

### High-pressure pumps

The low-noise radial piston pumps TR, TRG, TRD and TRGD are used for a range of media, in particular in the areas of high-pressure hydraulics and high-pressure dosing.

### Special solutions

Working directly with the customer, Beinlich develops needs-based solutions tailored to the specific application demands in a very short space of time – also making use of the products from the other Echterhage companies.

### KNOWLEDGE, EXPERIENCE AND SECTOR KNOW-HOW – EVERYTHING IN THE RIGHT DOSE

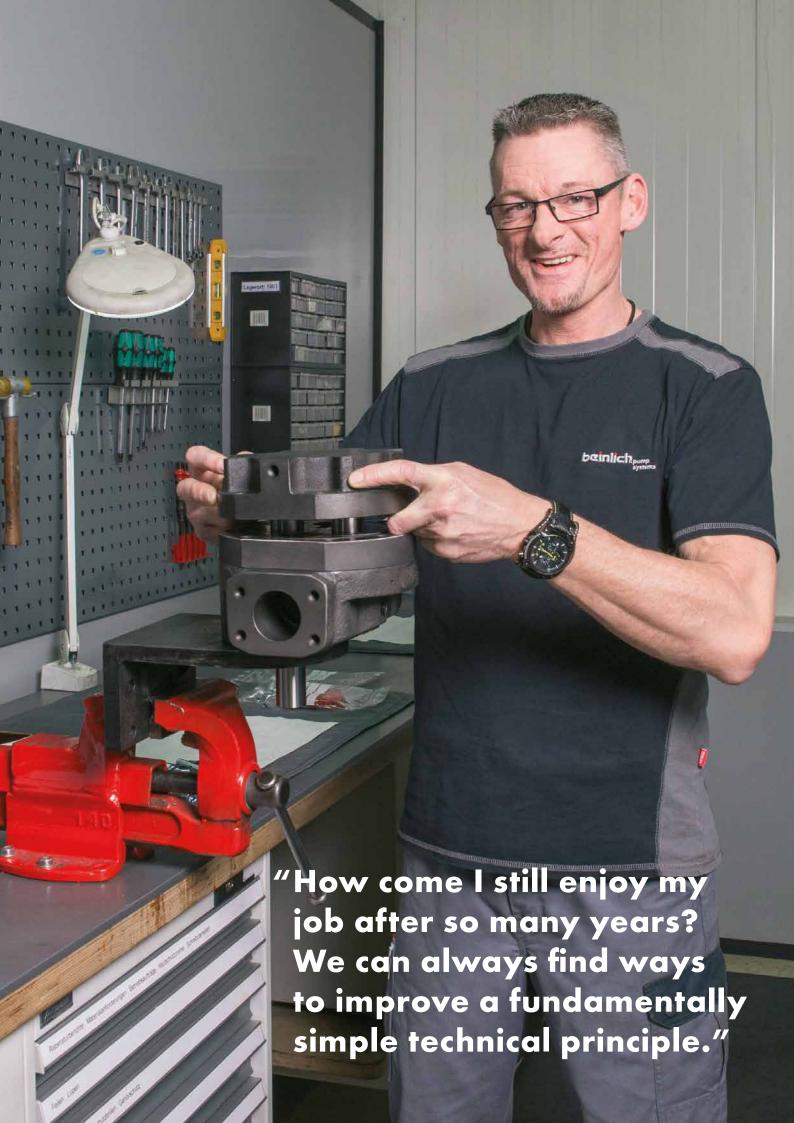
Our pump expertise is based on experience from more than half a century on the market. We sell our customers much more than just a product.

Employees of Beinlich understand their customers' systems and know how the individual components interact. That's how we are able to respond to the customer's specific requirements and select the right pump for their application.

An exact understanding of the demands of all the different sectors is a prerequisite for excellent collaboration – whether with traditional mechanical engineering companies, manufacturers of highly sensitive electronic components or a pharmaceutical company operating under strict conditions. Our employees contribute to the success of our customers with a precise dose of knowledge gained from projects over many years. We are familiar with the properties of our pumps in the majority of customer systems. We know how a broad selection of fluids will behave in a wide range of environmental conditions. This application expertise means we can offer our customers the best possible solutions.











Oleotec has been synonymous with reliable and safe pressure measurement in hydraulic systems for more than 40 years. The company distributes a comprehensive range of check couplings, hydraulic hoses and manometers under the name MCS, "Mini Control System". The hydraulic components from Oleotec are reliable and cost-effective, and can be used at any point in the hydraulic system in many different industry sectors.







28 Oleotec S.r.l.









### Check couplings

Check couplings from Oleotec can be installed at any point in the hydraulic system where pressure needs to be measured.

### Hoses and fittings

The micro hoses and fittings can withstand pressures of up to 630 bar and can be installed without tools.

### Manometers

Oleotec glycerine-filled and digital manometers are ideal for pressure monitoring on hydraulic machines.

### Test kits

The test kits include all Oleotec components: manometers, hoses and corresponding fittings – packed in a plastic or metal case.

Oleotec S.r.l. 29



## COPING WELL UNDER PRESSURE – HYDRAULIC COMPONENTS FOR PRESSURE MONITORING

Whenever pressure needs to be monitored and measured safely and reliably in a hydraulic system, Oleotec should be your first port of call. Thanks to our many years of experience, we understand the requirements of our customers and know exactly how much force our products need to withstand.

In our fully automated production hall, hydraulic hoses, check couplings and manometers are manufactured quickly and in high quality. We are also fast and flexible when it comes to producing custom orders. We use our passion for invention to continuously improve the product characteristics of our check couplings, ensuring that our products can meet all demands, reliably and sustainably.



30 Oleotec S.r.l.



### PEOPLE, LIFE, CAREER -**EVERYTHING FLOWS**

"Panta rhei - everything flows"; for us, that doesn't only apply to the fluids in our technical products, but also in a philosophical sense: life flows along - every day there are new things to discover, and people are constantly developing. In this spirit, we encourage the vocational training of young people and the professional development of experienced employees equally.

The basis for a successful career lies in well-founded, practical, qualified training. Echterhage Holding therefore sets very high standards when it comes to training, and also promotes the continued professional development of trainees and student placements in various business and commercial technical roles.

Professionals will also find excellent long-term prospects with us: we offer an attractive working environment in an internationally oriented company to individuals having sound qualifications. As we are also looking to expand further in the coming years, talented applicants can expect not only interesting tasks but also attractive opportunities for personal career development. We are thus always open to speculative applications.

Moreover, we are happy to give interns a detailed insight into working life, and provide the ideal working environment for motivated students to complete their diploma, Bachelor or Master thesis with us.

As well as the professional development of our employees, we are also committed to their health. Whether seated activity, manual labour or stressful travelling - the working day can all too quickly put a strain on one's health. We therefore have an extensive range of options to promote good health, from balanced lunches to physiotherapy and massage, and even our own gym.









### ENGAGEMENT STRENGTHENS THE REGION

Social responsibility is more than just a "good cause". By supporting clubs, initiatives and organisations around each of our company sites, we contribute to ensuring that the region remains a good place to live. We want families to feel happy here, which also means the location remains attractive for jobholders and trainees.

In addition, working with children and young people in clubs is becoming increasingly important for their education. It promotes the development of social skills, a sense of responsibility, and self-confidence. Motivation and tolerance, a willingness to take part, and team-working skills are also encouraged – characteristics that also play an important role later in professional life.

We have therefore gladly provided personal and financial support for sports clubs, volunteer fire departments and the promotion of local customs and traditions for many years. We also work actively for refugee aid, school social work and promotion of culture, as these are a matter of heart.





- 1. Horse Show Balve Optimum | 2. Icehockey Iserlohn Roosters
- 3. Festival Association Balver Höhle | 4. Sportsclub Neuenrade





### **CONTACT US**



#### **HBE GmbH**

Hönnestraße 47
58809 Neuenrade/Germany
Phone +49(0)2394/616-0
Fax +49(0)2394/616-25
info@hbe-hydraulics.com
www.hbe-hydraulics.com



#### **VSE Volumentechnik GmbH**

Hönnestraße 49
58809 Neuenrade/Germany
Phone +49(0)2394/616-30
Fax +49(0)2394/616-33
info@vse-flow.com
www.vse-flow.com



### **DST Dauermagnet-SystemTechnik GmbH**

Hönnestraße 45
58809 Neuenrade/Germany
Phone +49(0)2394/616-80
Fax +49(0)2394/616-81
info@dst-magnetic-couplings.com
www.dst-magnetic-couplings.com



### **Beinlich Pumpen GmbH**

Gewerbestraße 29 58285 Gevelsberg/Germany Phone +49(0)2332/5586-0 Fax +49(0)2332/5586-31 info@beinlich-pumps.com www.beinlich-pumps.com



### Oleotec S.r.l.

Via Varese 19
21050 Cantello (VA) Italy
Phone +390332/419711
Fax +390332/417565
info@oleotec.it
www.oleotec.it

