

# Pleiger Maschinenbau

our company profile



### **PLEIGER MASCHINENBAU**

- \_Hydraulic and electro-hydraulic actuators
- \_Hydraulic systems and controls
- **\_Tank Measuring Systems**
- \_Centrifugal pumps for all kinds of water and sewage
- \_Non-ferrous and light metal casting

# Pleiger - Quality since 1925

Founded in 1925 by Paul Pleiger, the former Paul Pleiger Maschinenfabrik initially manufactured compressed air valves and fittings for the mining sector, and a few years later they were also manufacturing pneumatic mining pumps. In the 1950s, the product range for the machine engineering sector grew to include components for hydraulics (radial piston engines, swivel drives) and eventually centrifugal pumps for waste water. Simultaneously, the company diversified its production of plastic products, adding cast elastomers and later thermoplastics as well. In the years that followed, the electrotechnology and laser optic divisions were founded. At the end of the 90s the existing divisions were split into independent companies, among those PLEIGER Maschinenbau. The development of new markets, the introduction of new products and rolling these activities out overseas led to significant growth, with four sites in Germany and manufacturing facilities in the USA, China and Korea.

### All from a single source!

PLEIGER is a strong partner for hydraulic systems and components and is one of the global market leaders for electro-hydraulic ship equipment, as well as for centrifugal pumps, coke oven valves and cast products made from light and non-ferrous metals. PLEIGER combines the innovative drive of a high-tech German manufacturer with the down-to-earth character of a tradition-conscious family business, and offers long-term perspectives with an own in-house training and research centre. PLEIGER stands for stability and sustainable growth.

PLEIGER is an established partner of numerous major industrial companies. Furthermore, we are also partnered with the most famous shipyards around the world - over 7,000 ships are fitted with Pleiger equipment. Every order benefits by our experience in project planning and equipment design. This know-how helps us to support our customers with their project planning and execution of orders. Certainly you will also profit by our knowledge and experience. You will save time and work by collaborating with a supplier who delivers everything from a single source, from project planning through to complete production and commissioning.

More at: www.pleiger-maschinenbau.de









**Pleiger Hydraulic Actuators** 

For everything you want to move

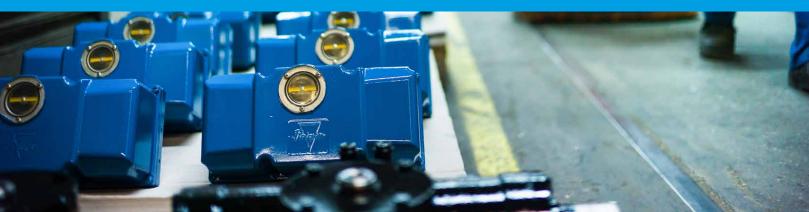
PLEIGER delivers hydraulic components and systems which have been tailored to the demands of industrial applications. PLEIGER's hydraulic and electro-hydraulic rotary and linear actuators are known for their long service life and maximum reliability at high power densities even when faced with large variability.

Concerning hydraulic actuators, PLEIGER offers both electronic position indicators and hydraulic remote displays which operate wirelessly. The electro-hydraulic actuators can be connected to external bus and control systems via control modules or controlled in their own failsafe bus loops. Complex control tasks are realised with the help of PLEIGER's intelligent control systems.

### **Special features:**

- \_Up to 360° swivel angle
- \_Single acting spring to open or close
- \_Double acting
- \_Single acting with failsafe/fast-acting closing or opening function
- \_Adjustable end position limiters and dampeners
- \_Electro-hydraulic linear actuators
- \_Solutions for ambient temperatures down to -55°C without heating





# **Hydraulic Actuator Systems**

### For industrial uses and power plant construction

We design our equipment in close cooperation with clients and operators: including hydraulic power units, cylinders, swivel drives and their corresponding controls, with redundant SPS, a touch screen panel and data exchange with the control system. Therefore, together with the operators of our hydraulic actuator systems, we can ensure that the desired high availability and operational safety of the equipment is achieved.

### Typical areas of application:

- \_Operation of changeover dampers (diverter dampers) in combined cycle gas turbine power stations
- \_Operation of turbine inlet and bypass valves in thermal power stations.
- \_Valve and damper drives with ON/OFF or control functions.
- \_Valve and damper drives with safety function ON or OFF during power failure
- \_Steel hydraulic construction: Floodgates, weir systems, lift bridges, jetties, and many more
- \_Pumping stations, waterworks and sewage systems
- \_Oil and gas industry



Hydraulic power unit for diverter dampers: Outdoor installation, control cabinet with redundant SPS, on-site operation via touch screen panel (suitable for daylight), climate control



20' container with integrated hydraulic system for outdoor installation and operation at -50°C. Ex versions for Canada (CSA approved).



Hydraulic power unit for lock systems, complete stainless steel model, with a backup diesel engine.



Hydraulic actuator for turbine bypass valve, with control function via proportional valve and quick opening function with three-way safety release.

# RELIABLE AND SAFE





# **Pleiger Sensors**

### For the best system solutions

We offer a variety of different sensors that facilitate the controlling and regulation of your processes and operations. As per your particular requirements, limit values can be included, and fill levels can be measured and processed in our automation equipment.

#### **EL-F and EL-T sensors**

PLEIGER EL sensors offer superlative performance as flange-mounted model or for installation within the tank. Our tried and tested sensors always work at optimal capacity and with extreme reliability even in aggressive media as well as in varying temperatures.

#### PEL electropneumatic tank level measuring system

Our PEL system is robust and long-lasting, incurring lowest maintenance costs yet providing the highest resolution. Furthermore, the sensor and electronics are not in contact with the medium being measured.

#### Radar sensors / Multi-flange

PLEIGER radar sensors offer the perfect solution for measuring oils or other chemicals with their precise level displays - even for large tanks. On an individually designed multiflange, additional limit switches can be implemented, as well as a link to manual measurement devices.

#### **Integrated Solutions**

In collaboration with PLEIGER Automation, we offer a complete visualisation of your processes.

#### All from a single source!





# **PKR Pleiger Pumps**

PLEIGER centrifugal pumps in the PKR series are dry installed, single-stage centrifugal pumps in the nominal size range of DN100 to DN700, which are deployed in conveying systems for domestic, municipal and industrial sewage, stream and river water, sludge and floodwater. We deliver the pumps as block or bearing bracket designs as well as for horizontal and vertical installation. For unusual applications we offer special designs.

### **Available impellers:**

- \_Spiral rotor (1 channel impeller)
- \_T-Spiral rotor (2 channel impeller)
- \_Y-Impeller (3 channel impeller)
- \_Vortex impeller

The PLEIGER pump PKR is very versatile, featuring a flow rate from 5 to 2,500 l/s and delivery heads from 7 to 45 mWs.

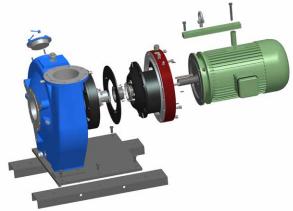
### **Special features:**

- \_Compact shape
- \_Very stable elements with multiple safety features
- \_Simple drive unit assembly and disassembly
- \_Direct drive: No gears, clutches, belts
- \_No need to align shafts and clutches
- \_Low-maintenance
- \_Large free ball passage in impeller
- \_Impeller turnability (very good hydraulic adaptability)
- \_No protruding edges in the impeller
- \_High pump efficiency
- \_Ample overrun thanks to a high moment of inertia
- \_Low stoppage sensitivity



PLEIGER PKR (without and with housing), with T-spiral rotor and double-acting mechanical seal.









# **Pleiger Metal Casting**

The PLEIGER foundry is flexible and thanks to its in-house model-making and mechanical processing, it is also economical and fast. In the foundry, we manufacture sand-casted parts weighting from 50g to 1,250kg.

#### Complete fulfilment from a single source:

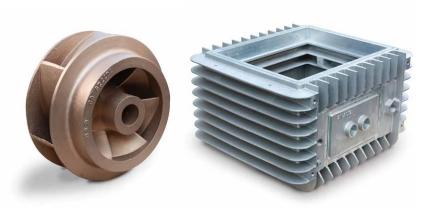
- \_Competent customer service
- \_In-house model-making
- \_Casting of individual items, as well as your prototypes
- \_Small and medium series
- \_Heat treatment
- \_Machining in our own workshop

\_DIN EN 1706 aluminium casting alloy

\_DIN EN 1982 copper casting alloy













### **Innovation and Experience**

For more than 90 years now, PLEIGER has been renowned as a reliable partner for hydraulic systems and hydraulic actuators. Our image is dominated by "customised" solutions perfectly suited to the needs of our clients. Innovation and experience combined with down-to-earth and long-term character are the hallmarks of our family-owned company. The development and training centre, as well as production in Germany offer wide-ranging perspectives. As part of the Pleiger business group, with over 650 staff members worldwide, PLEIGER Maschinenbau stands for stability and sustainable growth.



### **INNOVATION AND QUALITY - MADE BY PLEIGER!**

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