

LEWA Lifetime Services

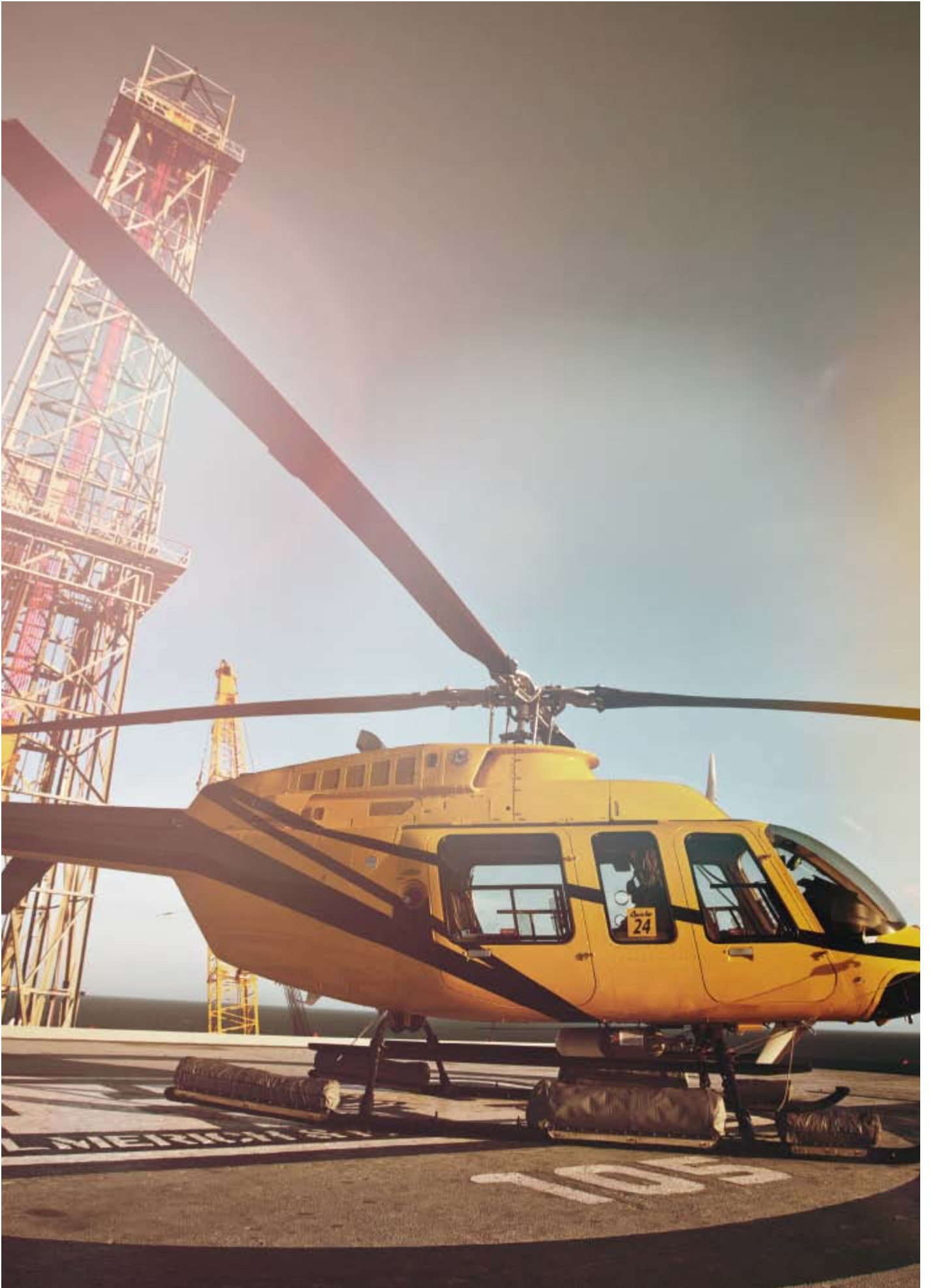
Customized service for every pump.



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As experts and solution providers for pumps and systems, not only do we offer our first-class technology, but we are also there to provide assistance throughout the entire life cycle of a product – from planning to commissioning, maintenance, repair and even upgrading. With our maintenance and repair service, we guarantee maximum availability and high service life for your LEWA products. Our certified specialists operate worldwide in accordance with the same high quality standards. In this way, we guarantee optimal support service, no matter where your LEWA product is located.



LEWA Services.

The advantages at a glance.

1



Accessibility around the clock

Our certified service staff supports you in all your needs around the clock. We are always available through our service hotline: +49 7152 14-1370

2



Certified technicians

LEWA exclusively employs certified service technicians. In this way, we guarantee uniform worldwide service work quality. Maintenance and repair work can be carried out either on-site or at a certified LEWA workshop in your area.

3



Original spare parts

We only use original parts, ensuring unobstructed performance and reliability of your LEWA products. The company headquarters in Leonberg, Germany have extensive warehousing available. Spare parts and service are quickly available on-site anywhere in the world. Inside of Germany, many spare parts are deliverable within 24 hours.

4



Flexible service concept

With a maintenance agreement customized to your requirements, you're on the safe side – from the beginning onwards. Thanks to preventive maintenance, we increase the process safety of your production, extend the service life of your products and reduce your costs.

5



Consolidated commissioning

Our certified service technicians provide worldwide commissioning support on-site. This guarantees that the pump runs smoothly and hassle-free as soon as installation is complete. Your employees will receive on-site training from our service technicians, specifically targeted towards function and application.

6



Modernization and repair

Older components are outfitted with our state-of-the-art industrial developments and thus the pumps are updated to the latest state of technology. Using analysis tools, the condition of the pump can be diagnosed on-site and measures can be taken selectively. If extensive repairs need to be made, send your pump to a certified LEWA workshop.

Services for a wide variety of industries. Certified and with many years of expertise.



Process industries (chemistry, petrochemistry, refineries)

LEWA service technicians have the necessary qualifications to perform maintenance, including preventive maintenance measures, on pumps in process industry operations. Our employees have the required security passes and training, such as TSA TWIC cards or training in SafeLand, SafeGulf, RigPass, Basic Plus and SCC Orientation.



Pharmaceutical, life sciences and biotechnology industries

Systems maintenance according to specifications is critical for manufacturing pure and high-purity products. For this reason, please make sure that your pumps and systems continue to work precisely and reliably. A maintenance agreement allows our service technicians to carry out preventive maintenance work in your cleanrooms or pure environments, replace critical parts and train your personnel. Thus, you can be sure that your process meets the highest FDA, ASME BPE, GMP or EHEDG requirements.



Oil and gas industry

The commissioning and repair of pumps and injection skids – offshore and onshore – are a part of our daily business. As such, our service technicians have undertaken specific certified training with “BOSIET” certification (Basic Offshore Safety Induction and Emergency Training), MIST (Minimum Industry Safety Training) as well as additional training and certification specified by the customer which guarantees virtually 100% self-sufficient on-site work. In this way, you can rest assured that your manufacturing is secured, your operating times are maximized and that you can ensure employee security. Spare parts and our offshore-qualified team can be dispatched to almost any location within 24 hours.





LEWA Maintenance Services.

Guaranteeing uninterrupted availability of your pumps.

Professional maintenance by certified employees using original LEWA spare parts provides the basis for continuous availability of your LEWA products. In order to ensure that you are well-prepared at all times, you will receive a timely, non-binding offer for the spare parts relevant to your operations. In addition, we offer a customized maintenance agreement, specially coordinated to your LEWA products. Thus you can concentrate fully on your core business and reduce operation and maintenance costs.

Your advantages:

Warranty extension

Maximum availability of the pump thanks to LEWA expertise

Fast response times when service is required

Long-term cost projection

Low administrative effort

By offering our modular service options, we provide you with the optimal solution for the maintenance of your system or pump. We prepare the maintenance agreement by speaking with you in depth about your requirements and ideas. We would be glad to work out a customized maintenance concept with you. Please get in contact with us!

Service intervals

The service interval is determined by three criteria:

1. Number of load changes/stroke count
2. Valve load applied through discharge pressure
3. Usage requirements / accuracy

Service level A:

Service level A is concentrated on the parts on the pump head in contact with fluid and includes the following processes:

- Replacement of the diaphragm and wear parts of the fluid valves
- Checking the hydraulic valves and all moving parts of the pump head
- Replacement of the high-pressure seals
- Replacement of the gaskets to the environment
- Replacement of the toothed-rim motor coupling
- Checking the gearbox gasket on the motor
- Oil change on the gear and pump head

Service level B:

- Includes service level A
- Complete overhaul of the gear
- Replacement of all roller bearings
- Checking all slide bushings and the moving gear parts
- Inspection of the worm wheel set
- Replacement of the gaskets
- Replacement of the couplings between the pump elements

Service level A:

Service level B:

Pump diagnostics.

The "ECG" of the metering pump.

Using LEWA diagnostic equipment, our service technicians are able to carry out inspections of the fluid and hydraulic components of many LEWA pumps. With relatively little effort, the device can determine wear using an indicator diagram. Thus, you can plan the availability and maintenance intervals of your pumps in the best way possible. If you acquire your own diagnostics tool, a technically sound remote diagnosis can also be carried out for your pump. You can transmit the diagram to us and receive instructions for troubleshooting promptly.

Possibilities:

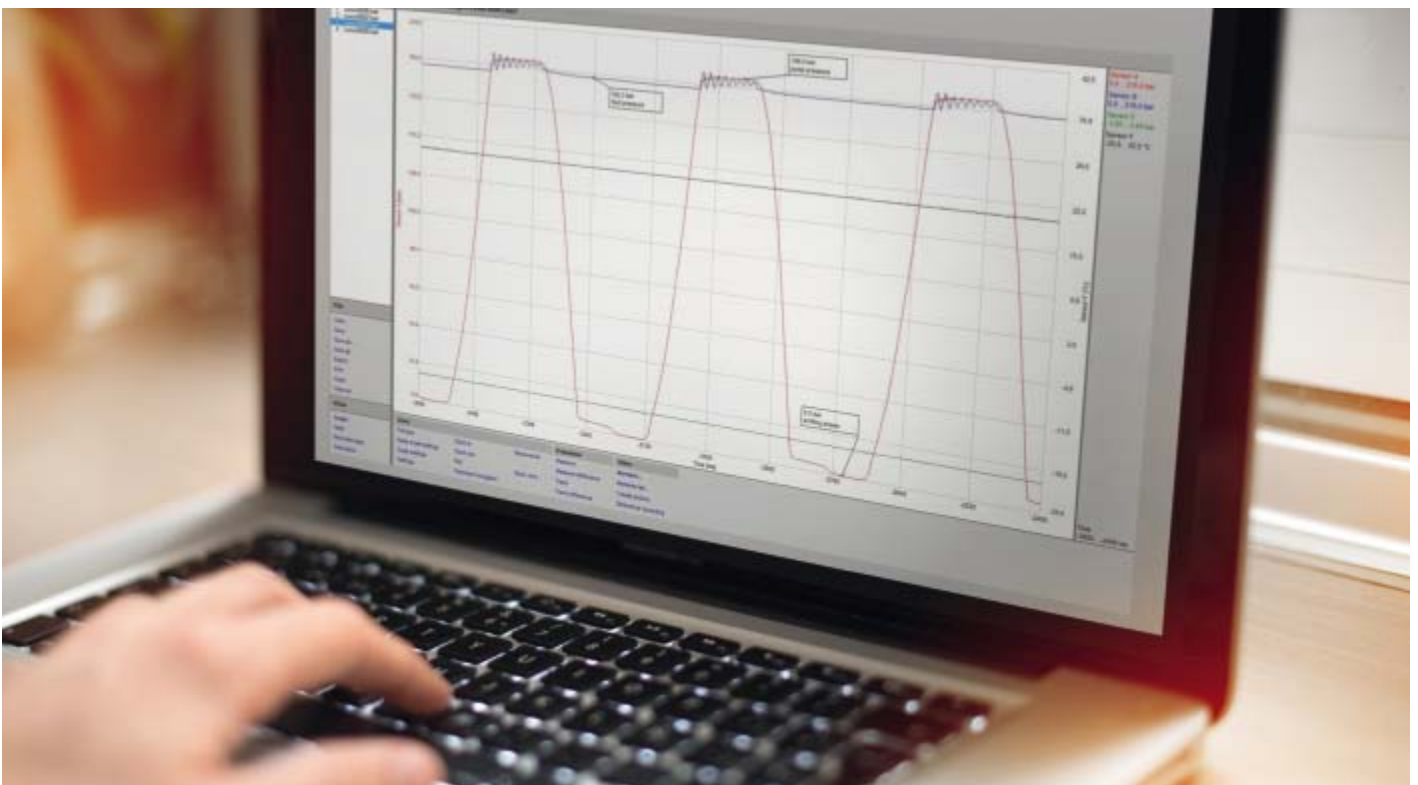
Monitoring of the current operating state of the pump

Early diagnosis of valve and hydraulic part wear

Maximization of the service life of wear parts and components

Quick error detection without process interruption

Short downtimes thanks to targeted corrective maintenance



LEWA Valve Check.

The testing service for pressure relief valves.

Ensure maximum process safety with the LEWA Valve Check*: We check your pressure relief valves and make the adjustments you specify. Our trained experts carry out their work in accordance with strict quality specifications.

Your advantages:

Reduction in costs thanks to process safety

Prompt availability

Use of LEWA original parts

Execution by qualified personnel

Maintenance certification

Includes return shipment

All-inclusive price

* LEWA ecosmart-valves excluded
Services: Visual inspection, cleaning of mild contamination, pressure setting/checking, replacement of o-rings and sealing rings, return delivery.
Excluded services: Cleaning of heavy contamination, overhaul work, the replacement of spare parts, work time for the replacement of spare parts.

Further information on the Valve Check can
be found on our website:
<http://www.lewa.de/en/services/valve-check/>



Pump modernization.

Adaptation to current requirements.

Is your pump going to be used for another range or application? We can convert the pump to different dimensions. Through the conversion of the available machine, you can save costs that would otherwise be spent on new acquisition.

Modifications to the following parameters can be taken into account at the same time:

Material wear resistance

Flow rate

Fluid properties

Discharge pressure

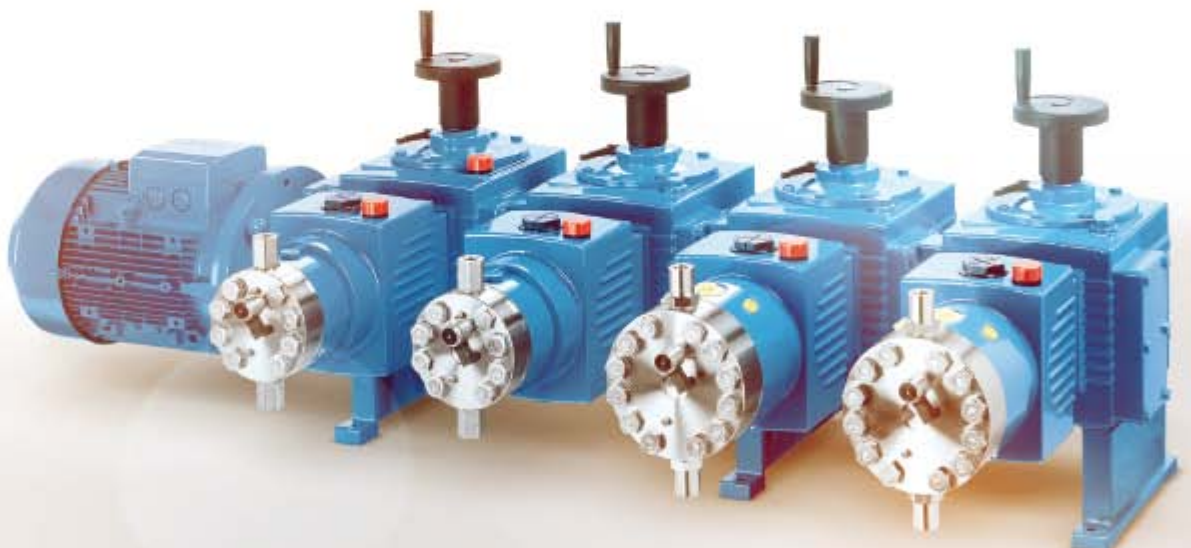
Conversion possibilities:

Attachment or reduction of pump elements

Change of the piston diameter (gear power limit)

Change of material for the wetted parts

Valve adjustment



Additional Services.

2nd Market – Used pumps

High quality is our standard. Which is why you can rely on our 2nd market pumps for short-term tasks without hesitation. Every pump has been checked and overhauled by our experts and adapted to your requirements. Our experts will consult with you during the selection process and handle the complete project management – from shipping to the design and all the way to commissioning. Here, you can count on availability that is nearly as high as with a new pump.

Further information on our offers can be found at:
<https://shop.lewa.com/en/secondmarket>



Used pumps

There are times when critical situations require fast solutions. Our used pumps are a reasonably priced option for short-term tasks. We offer a selection of different models. We will be happy to assist you and work together to find the right pump.

Your advantages:

- Completely refurbished machines, modified for your specific application
- Warranty for systems
- Cost-effective and promptly available

Pump rental

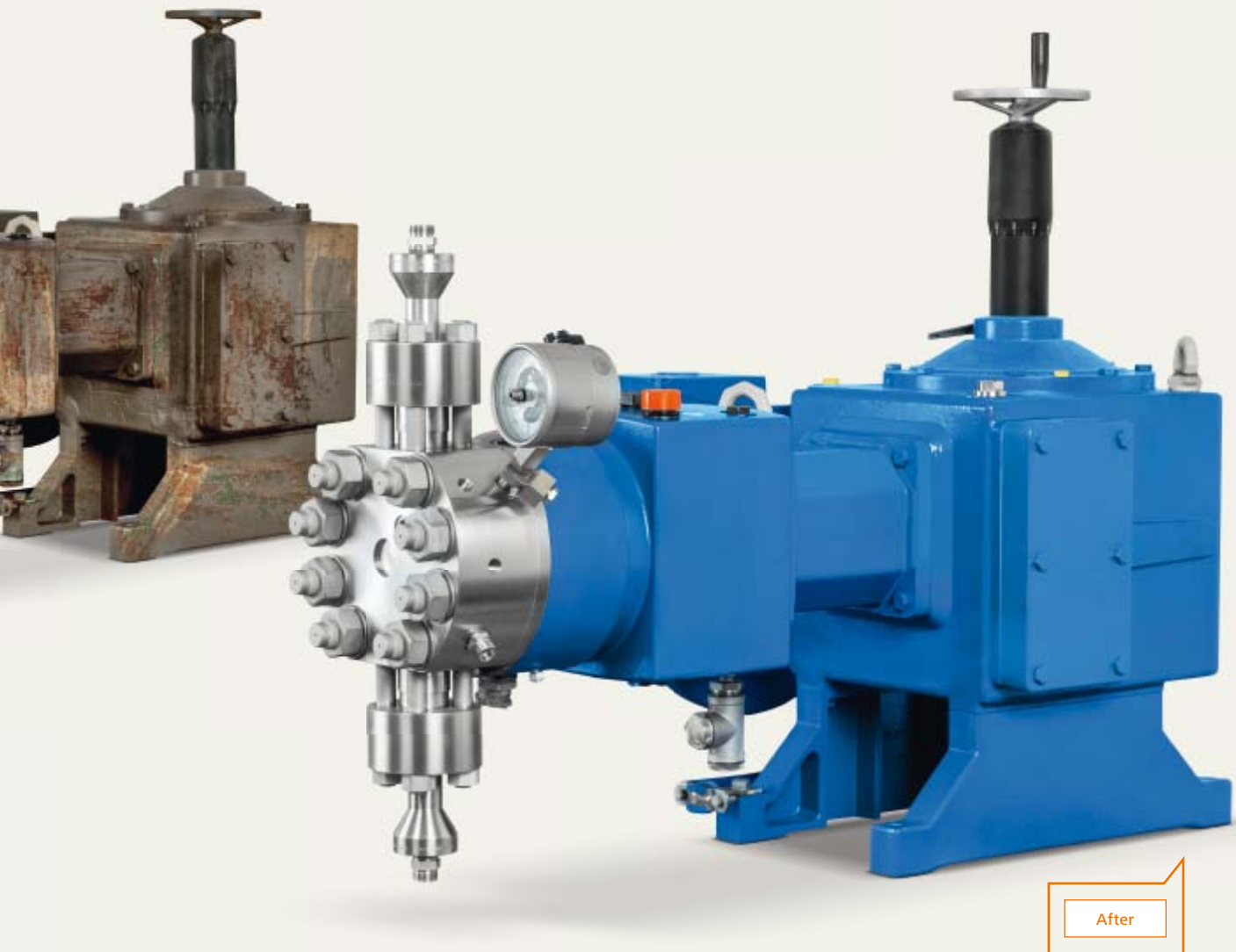
Our rental service equips you for short-term tasks. The use of rental pumps can help you to avoid production losses, particularly for bridging maintenance and repair times.

Your advantages:

- Cost-effective procurement
- Optimal for short-term tasks
- Opportunity to test new processes

Before





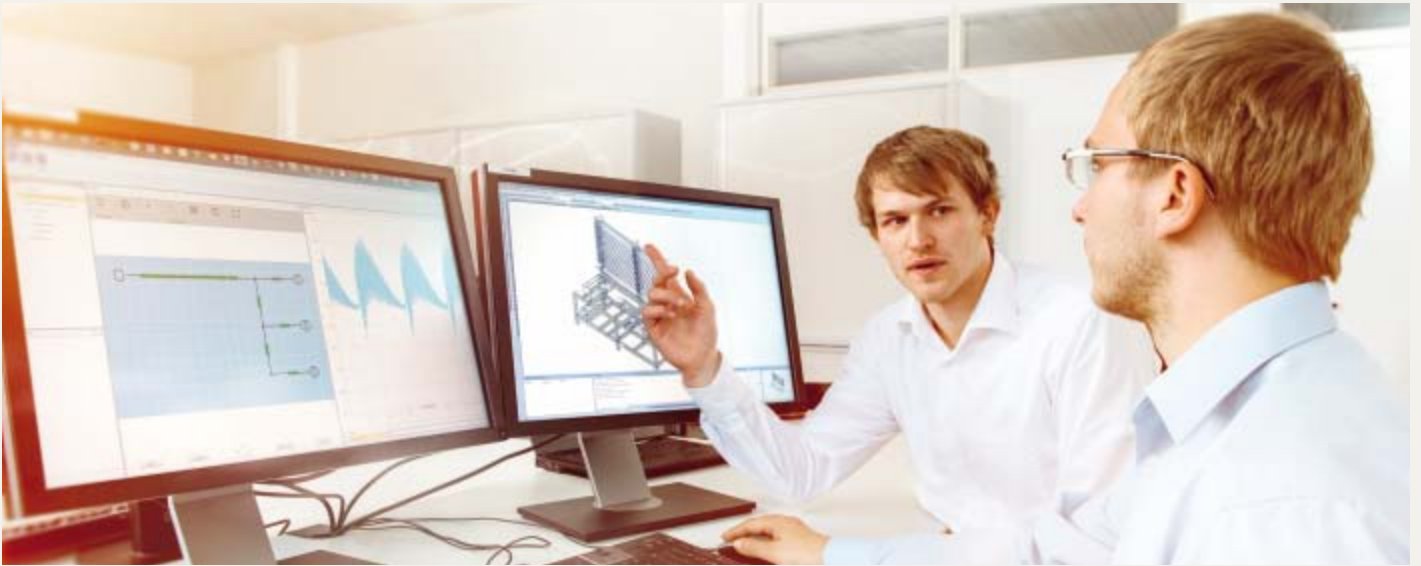
Buyback

Decommissioning, modification or expansion of systems:
All of these can lead to a pump no longer being required.
We offer various buyback options.

Your advantages:

- Earnings for worn-out pumps
- Disassembly and removal costs can be deducted from the buyback amount for the pump

Additional Services. For reliable and safe operation.



Pulsation studies

Especially with oscillating positive-displacement pumps, interactions with connected pipelines and system parts must be taken into consideration. With the aid of pulsation studies, we can inspect your installation and ensure, even during the early planning phase, that the complete system will later perform reliably and safely. For existing systems, we can carry out a systematic root cause analysis by means of a pulsation study for critical operating states, allowing us to work out measures for individualized system optimization. Advantages include reduced investment costs thanks to optimal dimensioning and positioning of the components, as well as stability and a long service life for the entire system.

We conduct the study with our PumpDesign software. The study provides information about:

- Mass pressure fluctuations, induced by the acceleration force of the pump
- Volumetric efficiency
- Suction pressure loss
- Minimum pressure at suction flange
- Pressure loss and pressure pulsation in pipelines
- Cavitation and overloads
- Resonance at critical speeds

We are the world's only pump manufacturer who can carry out numerical simulations and check them against API 674 criteria. This means that you receive detailed information about dynamic processes in complex pipeline systems and pressure amplitudes without having to consult external institutions. Once a pulsation study has been carried out, you have the option of a more in-depth mechanical analysis. For this purpose, detailed information about the pipeline fasteners is needed. The results provide information about the mechanical tensions, forces, torques and deflections to be expected. You get a detailed mechanical assessment of your pipeline network which displays the possible optimization potential. For more detailed information, refer to our LEWA pulsation studies brochure.



Customer training

The better the user is informed and trained, the more effectively pumps and systems can be used. That is why LEWA offers specialized seminars within our customer training program through which first-hand expert knowledge is provided to our customers, wherever they may be located in the world. Our seminars are intended for engineers and technicians who operate and plan LEWA metering pumps and systems.

- Volumetric metering with LEWA metering pumps (Seminar S1), target group: Engineers and technicians who plan and operate the installations
- Maintenance and servicing of LEWA metering pumps (Seminar S2), target group: Metering pump operators
- Operation and upkeep of LEWA odorizing systems (Seminar S3), target group: Operators of LEWA odorizing systems

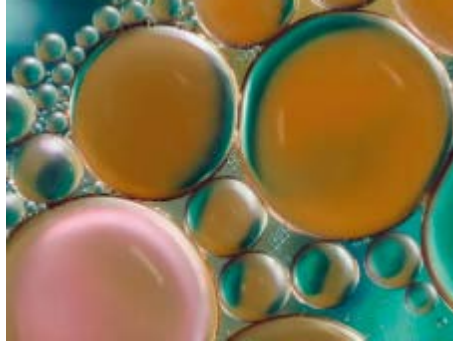
Further information on customer training can be found on our website:
<http://www.lewa.de/en/services/customer-training/>



Creating Fluid Solutions. For more value created.



Technical consulting



Fluid and process
engineering tests



Lifecycle concepts and
energy optimization



Process automation



Pulsation studies and
pipeline calculations



System layout and integration



Creative development
and refinements



Commissioning and
maintenance service



Spare part and service concepts

Creating Fluid Solutions.

Driven by our commitment, our trendsetting products and innovative technologies have set benchmarks for diaphragm pumps, process pumps and metering systems for over 60 years. We solve complex tasks from a single source. That ranges from custom pump design, basic and system engineering, global project management, and pretesting to commissioning and maintenance on site. Our consistent drive always to develop the best solutions for the customer provides you with a competitive advantage and visible added value.

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