

## **LEWA JEC Pumps**

Perfect processes demand optimised solutions











- Food
- Beverages
- Pharmaceuticals
- Cosmetics
- Chemicals





# As varied as your applications LEWA JEC Pumps



and hygienic designs for clean, low-stress



Beverages: hygienic design conforming to certification. SIP/CIP cleaning.



Food: for media of different viscosity with a minimum of turbulence or shearing.

#### A broad spectrum

product handling

LEWA JEC Pumps provide intelligent solutions for individual industrial sector applications. They are designed specifically for conveying fluids in the low to high viscosity range. They are distinguished by a large variety of designs and a broad application spectrum covering food, beverages, pharmaceuticals and the cosmetics and chemical industries.

#### For optimised processes

LEWA JEC employs innovative pump technology to optimise production processes. For example in food and beverages production where each production stage must be carried out with low stress and minimum bacteria, and the LEWA JEC range includes hygienic pumps for low-pulsation conveying. In contrast the chemical industry requires safe conveying and metering of aggressive, high-viscosity and abrasive products. Products with differing designs and material quality are available for optimum adaptation to each special requirement. Advantages include:

- Low-stress product conveying
- Suitable for medium and high viscosity media
- Hygienic designs
- Rotary piston with dry running protection
- Speed-related conveying volume
- High metering precision
- CIP/SIP capability
- Operating safety for changing media temperatures





Chemical industry: simple and reliable technical solution for production safety.

#### For every requirement

LEWA JEC draws on a broad variety of concepts and on decades of experience to sucessfully meet every requirement. The right pump for each application is selected in close consultation with the customer and on the basis of process data. Adapted sealing solutions and compliance with international standards (3A, FDA, EHEDG, ATEX) secure the handling of the most valuable products. Reliable, low-maintenance pump technology minimises shutdown periods.

LEWA JEC can also develop customised solutions on request. See page 7 for more details.



### For high viscosity media: ZL, JTP and ZLC rotary lobe pumps



The ZL-version can be used for a variety of applications (also available with crescent-shaped rotors).

The rotary lobe pumps illustrated here are particularly suitable for viscous or abrasive media conveyed at 50 to 500 rpm.

The pump rotor design is selected to suit the level of viscosity or lumpiness of the conveyed medium. Rotary piston pumps are designed for continuous operation in practically every industrial area. To provide optimum pump selection we offer five rotor designs and six different seals.



Heated version: for tempered applications (e.g. chocolate production).

JTP: the truck pump has three vanes as well as a hygienic design that is frequently employed for applications involving food.

### ZL: the flexible pump for every application

- Low-stress product conveying
- High speed security
- Low noise level
- Broad application spectrum: from yoghurt, honey and marzipan to hydrochloric acid or bio diesel
- Suitable for extreme outdoor operating conditions (-/+ 0 to 200°C)
- Suitable for relatively large solid material content
- Pressures up to 30 bar possible
- Flows up to 100,000 l/h
- Front-loaded seal

### JTP: the light truck-pump for food applications

At only 55 kg, the truck pump is lightest and, in terms of conveying volumes, the "biggest" pump on the market. Flow direction can be horizontal or vertical.

- Easy to clean (manual cleaning or CIP/SIP)
- Smooth surfaces
- Countersunk rotor screws
- Securely-sealed rotor holder
- Light rotors
- Aluminium gearbox for electric and hydraulic motors

ZLC: the ultra-clean version has five vanes and an integrated drainage system, making it suitable for applications involving pharmaceuticals.

### ZLC: the ultra-clean pump for pharmaceutical applications

Pharmaceutical version with five vanes, practically 100% drainage for vertical flow.

- Large selection of connections
- Generously-dimensioned flow intake opening
- Surfaces < 0.8 µ
- On request < 0.6 µ electropolished
- Choice of six different shaft seals
- Easily exchangeable with other seal versions
- Short seal changing times
- Simple configuration of rotor tolerances



The high pressure version: for long conveying distances, up to 30 bar.

## For low-viscosity media: JCP, JSZ and JP centrifugal pumps



JCP: where no compromises can be made when it comes to hygiene.

JSZ: where a self-priming pump with a lateral duct is required.

### Wherever low-viscosity media are involved, JP, JCP and JSZ centrifugal pumps demonstrate their prowess.

They are equipped with exposed impellers, the optimum design for hygienic applications. Stainless steel alloys and solid components that comply with the most stringent requirements and ensure problem free operation. The pumps not only protect the product against stress, but are also robust and efficient and require low maintenance, thus providing the optimum solution for low-viscosity media.



JWP series is ideal for tasks involving pharmaceutical application (e.g "WFI – water for injection).

### JCP: the hygienic solution

The JCP series is mainly employed where hygiene is the top priority. This series is also available on request with a frequency inverter, can be continuously adjusted and has a wide speed range.

- 3 sizes
- Delivery pressures up to 7 bar
- Delivery volumes up to 80,000 l/h
- JWP series: fully drainable

#### JSZ: the self-priming solution

Type JSZ centrifugal pumps are selfpriming and operate on the lateral duct principle. Impellers with radiallyconfigured blades transmit the pressure energy to the conveyed medium. Very low sealing tolerance ensure excellent suction capacity.

- 4 sizes
- Delivery pressures up to 3 bar
- Delivery volumes up to 40,000 l/h

JP: when hygiene is important, but not the main objective.

#### JP: the efficient solution

The JP series provides a suitable and efficient solution wherever hygienic production is required, but ultra high hygiene is not a necessity. Because, in contrast to the JCP series, not all components are completely polished.

- 3 sizes
- Delivery pressures up to 5 bar
- Delivery volumes up to 80,000 l/h



Front-loaded seal: the JCP seal is integrated in the pump chamber. This facilitates maintenance and ensures that a hygienic design is achieved.



### For inhomogeneous media: JSB shear-pumps



JSB: optimal for mixed tasks, prevents the media from forming sediment.

JSB with hopper: for adding sugar types, powders, salts, spices, etc. in low-viscosity media.



Impellers with excellent suction capacity ensure that tasks are optimally realised during homogenising and emulsifying.

### The JSB series is uniquely at home in applications involving homogenising, dispersing, emulsifying and loosening.

The shear-pump easily breaks up accumulations or lumps and delivers completely consistent, reproducible results.

The rotor stator system mixes multiphase products efficiently at high flow speeds and a shearing rate of up to 125,000 1/s. The result: inseparable emulsions and incomparable homogenous final products.

#### Advantages

- Enormous savings in time
- Suitable for extremely varied batch sizes
- Uniform quality standards
- For applications where low stress on products is important
- Easy to clean: CIP/SIP or manual
- Simple maintenance
- Different sealing materials

#### Versions:

- 3 sizes
- Delivery pressures up to 2-5 bar
- Delivery volumes up to 50,000 l/h

### Profit from our know-how



### Always a step ahead with our partner JEC Ltd. in Korea:

JEC Ltd. was established in 1990 in Korea with the mission to offer "the most reliable products, the most reliable company and the most reliable people". The new plant which is comprised of a machining room, a warehouse, an assembly line and an office space. JEC Ltd. place great emphasis on technical equipment and a pleasant work environment to motivate our staff. Each year, JEC Ltd. has grown by over 30%. Our vision is "to be the number three sanitary pump manufacturer in the world by 2010", to provide the best competitiveness to customers, the highest return to everyone using JEC's products. JEC Ltd. has never stopped carrying out research and development on our products to achieve this vision. With this philosophy JEC Ltd. is a highly appreciated partner for the european members of the LEWA Group.



### Consulting/Engineering for special tasks

With over 10,000 applications in operation, LEWA HOV and LEWA JEC have one of the broadest application knowhow spectrums in the world. You too can profit from our experience. We regard ourselves as a solution and system provider for all applications involving conveying, metering and mixing of gases and liquids. We offer custom designed solutions ranging from small individual units to large inline systems, as well as process engineering consulting for complex tasks. Solutions that meet special process requirements:

- Individually-designed concepts for increasing the availability of your production plant
- Installation calculations
- Fluid evaluation
- Process engineering comparisons
- Commissioning and service

### Large-scale service network or greater availability

LEWA HOV provides the most comprehensive netwok of customer service offices in Germany and Europe for close customer cooperation and rapid availability. The central European warehouse in Leonberg near Stuttgart ensures rapid and flexible delivery of products.

- Pump and unit assembly at the Leonberg factory near Stuttgart
- Skillful repairs at our company headquarters
- Test stand acceptance at any one of our global service stations
- Spare parts supply: rapid service and years of availability
- Consulting service provided for specific customer spare parts stocking
- Maintenance and service contracts





### LEWA HOV – at your service europe-wide



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