

# Hannover Messe 2018: Liebherr introduces hydraulic cylinder series 380 bar

- 350 bar becomes 380 bar: higher power density for the same flexibility
- Optimised tandem sealing system for longer service life and higher efficiency
- Industrial cylinder series per ISO 6022 for higher flexibility and individuality for every application

Hanover (Germany), 4. April 2018 – Liebherr optimises its hydraulic components portfolio by introducing a new hydraulic cylinder series product range for pressures of up to 380 bar. Thus, Liebherr offers cost-effective standard solutions in a pressure range of up to 380 bar and presents the new cylinders for the first time at Hannover Messe 2018 (hall 23, booth B48).

Higher power density for the same flexibility, while remaining extremely resilient: Liebherr unveils at Hannover Messe 2018 the 380 bar hydraulic cylinder series product range. Thus, Liebherr optimises the already well-proven 350 bar product range and extends the pressure stages up to 380 bar. As a result, customers are offered optimum configuration flexibility. The double-acting differential cylinders can be used both in mobile machinery, such as construction machines, and in industrial applications.

Thanks to their optimised piston rod coatings, the hydraulic cylinders can be used flexibly in application-specific paintings, and, thanks to their corrosion protection, under extreme environmental conditions. No fewer than 20 different piston diameters are available, each of which can be combined with one of two piston rod diameters, so that 40 basic variants in total are available.

### Yet more power for heavy-duty tasks

The advantage of the 380 bar product range is the even greater power density compared to its predecessor. Despite having the same sizes and flexibility, the hydraulic cylinders of the 380 bar product range have more than 8% greater power than the comparable cylinders of the 350 bar range.

## Optimised sealing system

With the 380 bar series production range, Liebherr has also improved the tandem sealing system comprising a primary and secondary seal. This sealing system ensures even better pressure reduction, and thereby minimises the "stick-slip" effect. This makes the cylinders particularly low-maintenance and efficient. It also ensures longer service life. The sealing system is designed to be effective at operating temperatures of between - 30°C and +95°C.

## From components to system

From supplier of components to supplier of systems: this is the approach also adopted by Liebherr in the hydraulic drive systems technology sector. To complement the 380 bar product range, Liebherr can provide its customers with hydraulic power units manufactured in-house. An advantage of this is that the components are optimally matched and, therefore, constitute a particularly efficient unit assembly. The hydraulic power units can be combined with other components, such as sensors or a control system. The hydraulic power unit portfolio offers drive power of up to 75 kW and filling volumes of up to 2,000 L for operating pressures of up to 600 bar.

# Industrial cylinder series per ISO 6022

Also this year, Liebherr exhibits a hydraulic cylinder from the ISO 6022 range to underline the breadth of the product portfolio. In recent years, Liebherr has worked on expanding its product portfolio, so that a "comprehensive product range" is available to customers, if required. And the industrial series is an essential part of it.

The installation dimensions and fastenings of the series correspond to standard specifications, yet selected details offer customers the highest degree of flexibility and individuality for every application. For example, Liebherr offers suitable standard seal sets for mineral oils and biodegradable oils, along with special seal systems for low-flammability or heat-resistant hydraulic fluids. A broad spectrum of piston rod coatings and finishes is also available for the cylinders. These can be optimally integrated in machine tools, automation and manufacturing technology solutions and applications for

the automotive and steel industries. Depending on requirements, they can be fitted with the LiView position transducer, end position damping, proximity switches or pressure sensors, along with measurement connectors and ventilation.

# **Captions**

liebherr-hydraulic-cylinder-series-380-bar.jpg New hydraulic cylinder series with a power range of up to 380 bar.

liebherr-ISO-cylinder.jpg
Industrial cylinder series per ISO 6022

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