PSH Hydraulic Press Drive –
Transforming Your Press into a Servo Press
Drive Your Press with Innovation –
Save up to 50% on Your Energy Costs

The PSH does not use conventional valve control technology

Innovation
The PSH hydraulic press drive is true innovation.

Thanks to this drive system, you can significantly reduce the lifecycle costs (LCC) of your press, while at the same time boosting the productivity of your production process and increasing the quality of your products.

The PSH is suitable for new systems but can also be retrofitted to modernize existing presses.

Functionality
The PSH system uses a servo pump instead of conventional valve control technology. This concept simplifies the design of the press drive, while still providing an excellent level of functionality and performance.

Design:
- Servo pump
- Pressure fluid tank
- All hardware and software required to monitor, control and regulate the drive
- Safety technology in accordance with DIN EN 693

Engineering
We supply not only products, but ideas too. You can benefit from our many years of expertise with regard to managing complete drive systems.

Our system specialists are on hand to support you when it comes to starting the calculation and design process, moving onto the installation and commissioning phase, and in the event of any questions about cost-effective operation and maintenance concepts.
Features of the PSH system

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantages for Press Operation</th>
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<tr>
<td>Conventional valve control technology not required</td>
<td>Excellent energy efficiency</td>
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<tr>
<td>Active servo pump control</td>
<td>Optimum efficiency</td>
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<tr>
<td>Modular design</td>
<td>Simple drive system with excellent functionality</td>
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<tr>
<td>Few components</td>
<td>Less valve technology required</td>
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<td>Power/speed/position regulated by the servo pump</td>
<td>Power and speed precisely adapted to the pressing process</td>
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<td>Smaller oil tank</td>
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<td>Sensors for parameter monitoring</td>
<td>Established diagnostic functionality</td>
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PSH technical data

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<th>Specification</th>
<th>Value</th>
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<td>Maximum power</td>
<td>Up to 5000 kN</td>
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<tr>
<td>Maximum rapid motion speed (up/down)</td>
<td>400 mm/s</td>
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<td>Maximum speed (load profile)</td>
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Features of the PSH system

- The advantages for press operation
- The benefits for your company

- Conventional valve control technology not required
- Active servo pump control
- Excellent energy efficiency
- Optimum efficiency
- Energy cost reductions of up to 50%
- Reduced CO₂ emissions
- Modular design
- Few components
- Simple drive system with excellent functionality
- Easy system integration
- Suitable for new systems and as a retrofit
- Minimal costs for commissioning, training and maintenance
- Power / speed / position regulated by the servo pump
- Less valve technology required
- Less complex
- Power and speed precisely adapted to the pressing process
- Accurate reproducibility in terms of speed, power and cycle number
- Excellent flexibility and productivity for the press
- High quality products
- Improved thermal efficiency
- Smaller oil tank
- Easy system integration
- Resource conservation
- Sensors for parameter monitoring
- Established diagnostic functionality
- Simple preventative maintenance procedures

### The benefits for your company

- Energy cost reductions of up to 50%
- Reduced CO₂ emissions
- Easy system integration
- Suitable for new systems and as a retrofit
- Minimal costs for commissioning, training and maintenance
- Less complex
- Excellent flexibility and productivity for the press
- High quality products

### PSH technical data

- Maximum power: Up to 5,000 kN
- Maximum rapid motion speed (up / down): 400 mm / s
- Maximum speed (load profile): 40 mm / s
**Schematic diagram**

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**Ring area:**
- 1.1 Servo motor
- 1.2 Internal gear pump
- 1.1 + 1.2 Servo pump
- 1.3 Pressure sensor

**Piston area:**
- 2.1 Servo motor
- 2.2 Internal gear pump
- 2.1 + 2.2 Servo pump
- 2.3 Pressure sensor

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**Remote control:**
- 3.1 Electronic control system
- 3.2 Oil reservoir
- 3.3 Inlet valve with ST control cable
- 3.4 Press safety control
- 3.5 Operating cylinder
- 3.6 Position sensor