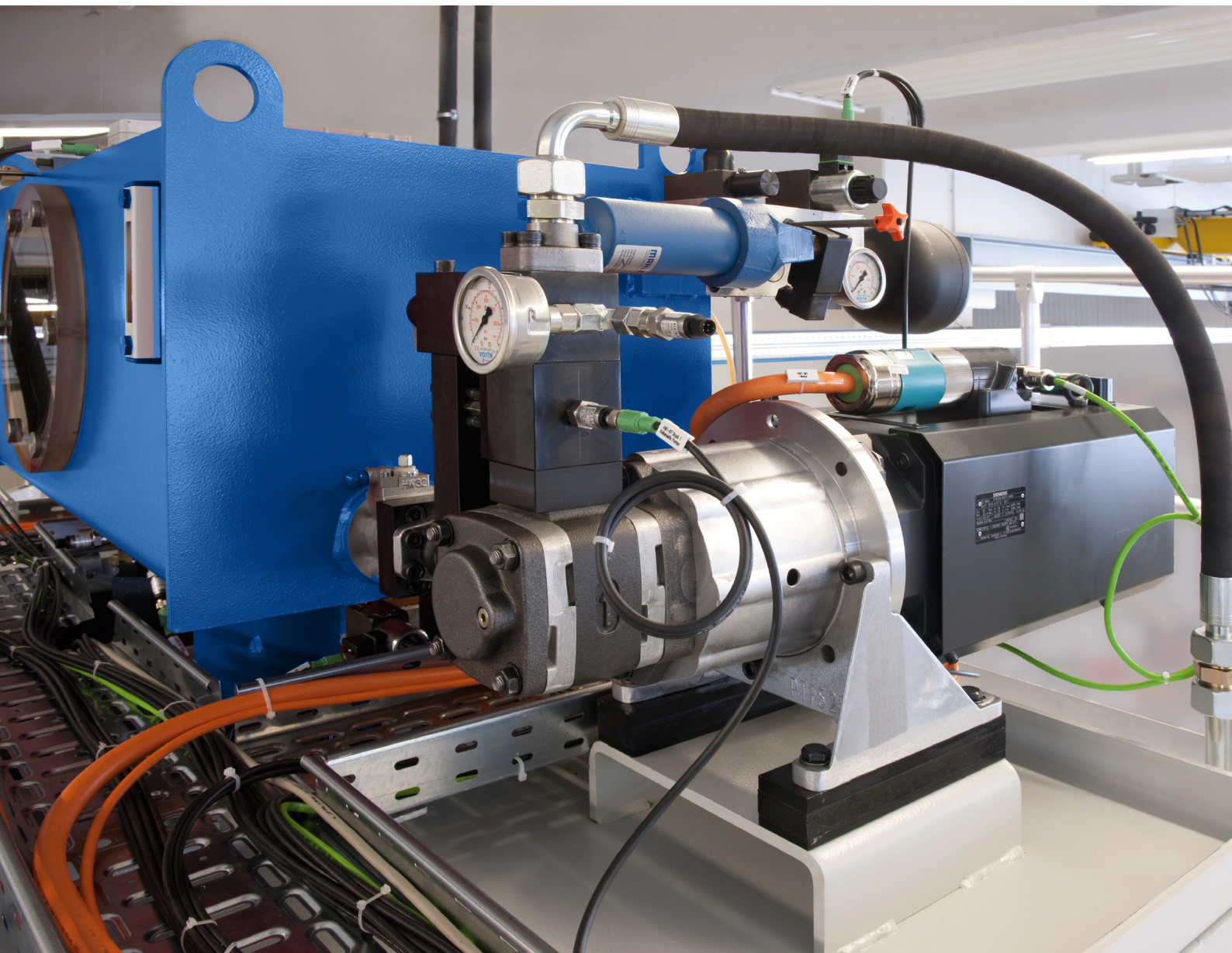


Transforming Your Press into a Servo Press Press Drive PSH



Drive Your Press with Innovation

Innovation

In the hydraulic press drive PSH servo pumps replaces the classic valve and control technology. This concept allows for an optimum adjustment of power and speed to the pressing process and simplifies the design of the press drive.

The complete system includes:

- servo motor pump group
- hydraulic power pack
- safety systems
- switching electronics
- sensors
- CPU
- I/O peripherals
- control panel with pre-built touch screen interface

Engineering

In close collaboration of Siemens with Voith, an optimal product combination was developed for the PSH series. The intelligent control allows a very flexible use of the press. Productivity increases and the manufactured parts have a very high quality.

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 on to the installation

Energy use in line with the process

Compared to conventional systems, the PSH offers energy savings up to 60%. Energy-efficient, with PSH modernized systems use only as much energy as the press requires in the various phases.

The comprehensive portfolio also for modernization

Press drive PSH can be easily integrated into the press and is suitable for new installations and for retrofits. The new drive solution requires significantly less space and less oil volume than older hydraulic systems; this makes it predestined for modernizing systems (retrofits).

Running costs

The PSH concept includes low cost of commissioning, training and maintenance. The state-of-the-art sensor system provides additional diagnostic capabilities, which supports preventive maintenance and, in the ideal case, condition-oriented maintenance.

Service

The use of proven standard components that are available around the globe and around the clock permits fast and simple access to replacement parts, and, as a consequence, secures the high availability and productivity of the press.

PSH Components

Scope of delivery

- Servo motor pump group
- Hydraulic safety modules
- Cabinet
 - Converter
 - Control Simatic S7
 - Software package
 - Control buttons
- Sensors
- Cable with a defined length for:
 - Sensors
 - Motor
 - Valves of scope of delivery
- Performance Fluid PF-400 (For the press drive PSH, exclusive use of PF-400 is mandatory.)

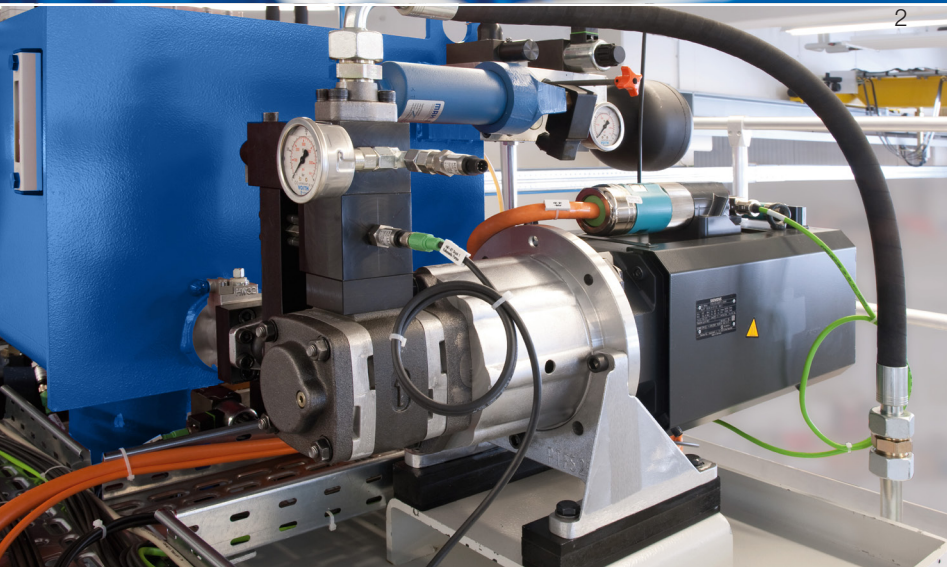
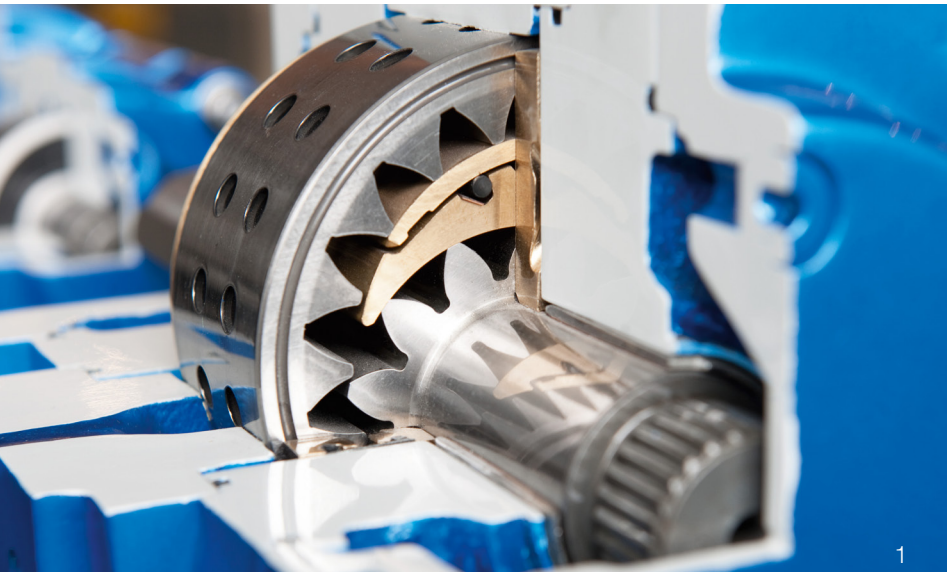
Options

- Power Pack (optimum filtering circuit, cooling,...)
- Hoses, tubes (hydraulics)
- Suction valve
- Cylinder
- Measuring system
- HMI (in Cabinet)
- Start up assistance

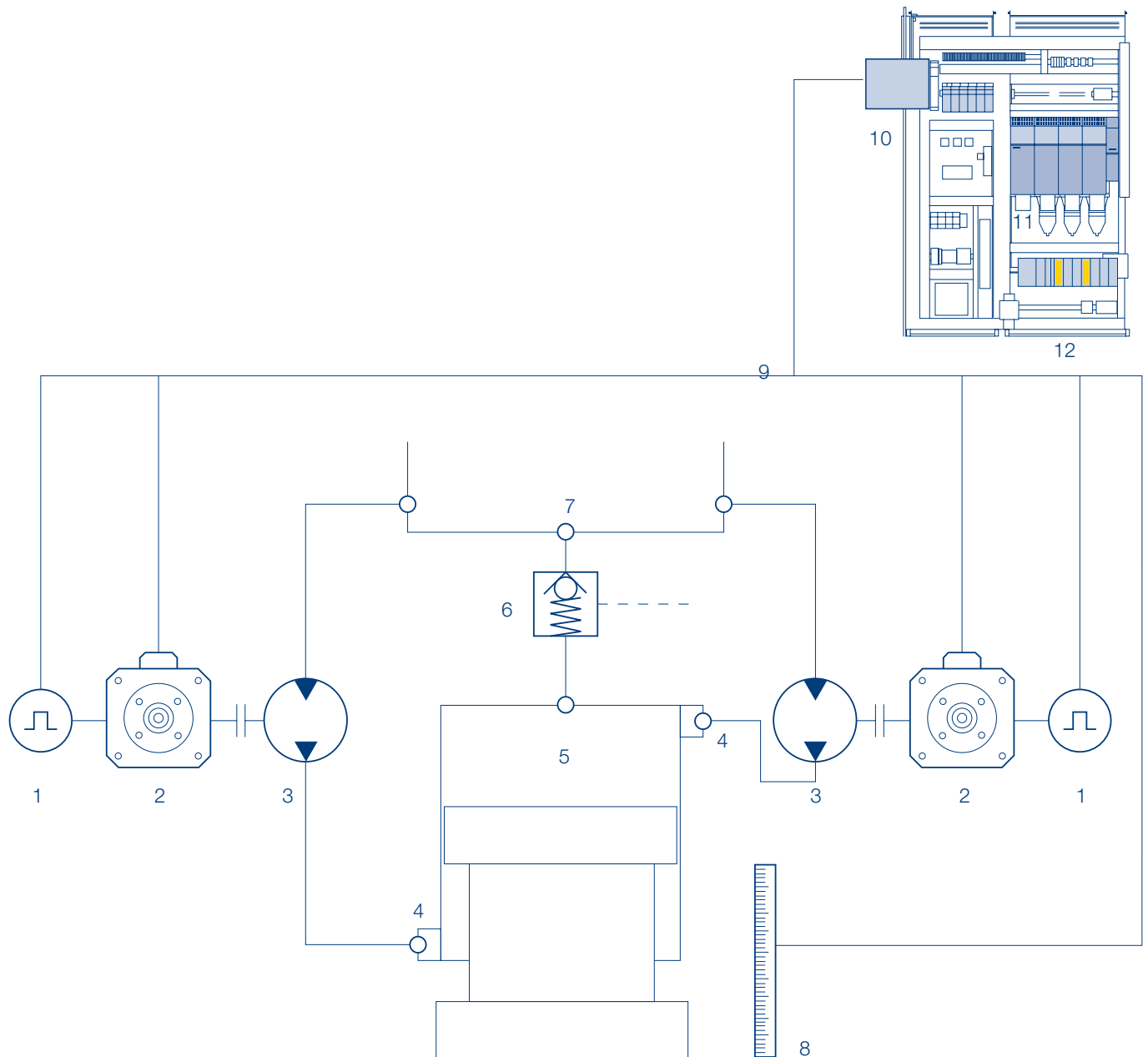
Advanced scope of delivery

- Advanced safety features in Simatic S7 CPU
- Die cushion control

- 1 Cutaway of internal gear pump model IPVP
- 2 Servo pump in the testing field
- 3 Cabinet



PSH Diagram



- 1 Encoder
- 2 Motor
- 3 Internal gear pump
- 4 Safety module
- 5 Main cylinder
- 6 Suction valve
- 7 Oil tank
- 8 Measuring system
- 9 DriveCliqu
- 10 Touchscreen MP377
- 11 Converter
- 12 Technology PSH

Advantages Using PSH

Features	Advantages	Benefits
<ul style="list-style-type: none"> • Conventional valve control technology not required • Active servo pump control 	<ul style="list-style-type: none"> • Excellent energy efficiency • Optimum efficiency 	<ul style="list-style-type: none"> + Energy cost reductions of up to 60% + Reduced CO₂ emissions
<ul style="list-style-type: none"> • Modular design • Few components 	<ul style="list-style-type: none"> • Simple drive system with excellent functionality 	<ul style="list-style-type: none"> + Easy system integration + Suitable for new systems and as a retrofit + Minimal costs for commissioning, training and maintenance
<ul style="list-style-type: none"> • Power / speed / position regulated by the servo pump 	<ul style="list-style-type: none"> • Less valve technology required • Power and speed precisely adapted to the pressing process • Accurate reproducibility in terms of speed, power and cycle number 	<ul style="list-style-type: none"> + Less complex + Excellent flexibility and productivity for the press + High quality products
<ul style="list-style-type: none"> • Improved thermal efficiency 	<ul style="list-style-type: none"> • Small oil tank 	<ul style="list-style-type: none"> + Resource conservation + Cost reduction
<ul style="list-style-type: none"> • Sensors for parameter monitoring 	<ul style="list-style-type: none"> • Established diagnostic functionality 	<ul style="list-style-type: none"> + Simple preventative maintenance procedures
<ul style="list-style-type: none"> • Voith-Siemens package 	<ul style="list-style-type: none"> • Integrated software package • Matched modular design • System know-how • System responsibility 	<ul style="list-style-type: none"> + Simple start up + Simple system integration
<ul style="list-style-type: none"> • Operation with Voith Performance Fluid (further data PF-400: 25000908210 -SDB-DEX- and 25000908210-TED-DEX-) 	<ul style="list-style-type: none"> • Very low frictional losses • High viscosity index • Outstanding wear protection characteristics • Compatible with commonly used sealing materials 	<ul style="list-style-type: none"> + Significantly enhanced efficiency of power transmission + Energy saving

Learn more about
press drive PSH



Voith Turbo H + L Hydraulic GmbH & Co. KG
Schuckertstraße 15
71277 Rutesheim, Germany
Tel. +49 7152 992-3
Fax +49 7152 992-400
sales-rut@voith.com

voith.com



VOITH
Engineered Reliability