

## Press Release

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### **Servo Valve DECV: More precision and lower operating costs for hydraulic control systems**

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**Heidenheim, Germany:** The new Voith servo valve DECV (Direct Electronic Copy Valve) is a further development of the Voith copy valve, which has already proven itself in countless hydraulic control systems. It combines the excellent operating characteristics and robustness with innovative valves and the associated electronic control. The single-stage, direct actuation ensures precise control: Through impulse response and accuracy, the DECV servo valve responds to demanding drive tasks. With a step response of only seven milliseconds, the DECV belongs to the class of highly dynamic valves. Thanks to the direct actuation, a hysteresis of considerably less than one percent is reached.

#### **Designed for High Loads**

The development of the DECV valve was focused on applications with high mechanical loads. The DECV's extraordinary parameters are also confirmed by its daily work environment outside laboratory conditions. For example, the servo valve has already proven itself in punching/nibbling machines under cyclical shocks of several hundred g ( $> 2,000 \text{ m/s}^2$ ).

#### **Cost Reductions through Simple Oil Filtering**

The Voith DECV valve is affected very little by oil impurities and can be used with oil of the cleanliness class 19/17/14 as per ISO 4406. This oil quality level can be reached with a common bypass filter system. Comparable servo valves often require higher purity levels, which can necessitate the use of expensive pressure filters. The Voith DECV therefore reduces the system's operating costs.

#### **Simple Integration and Remote Maintenance**

The programmable control electronics of the DECV offers all common interfaces, which simplifies integration into existing systems. The HS4-SV2 controller used in the DECV valve contains, in addition to the power amplifier for control, a configurable PLC/CNC. Frequently occurring user

cycles are already integrated and can be customized easily via field buses for specific requirements. Diagnostic data can be retrieved via Ethernet from anywhere in the world using the "PunchMaster" software tool belonging to the HS4 controller. This ensures the identification of faulty cycles and the quality assurance during production. An integrated sensor measures the pressure directly at the process connection and ensures extremely accurate and dynamic process monitoring and control. This avoids downtimes, which reduces the costs of repairs and service calls.

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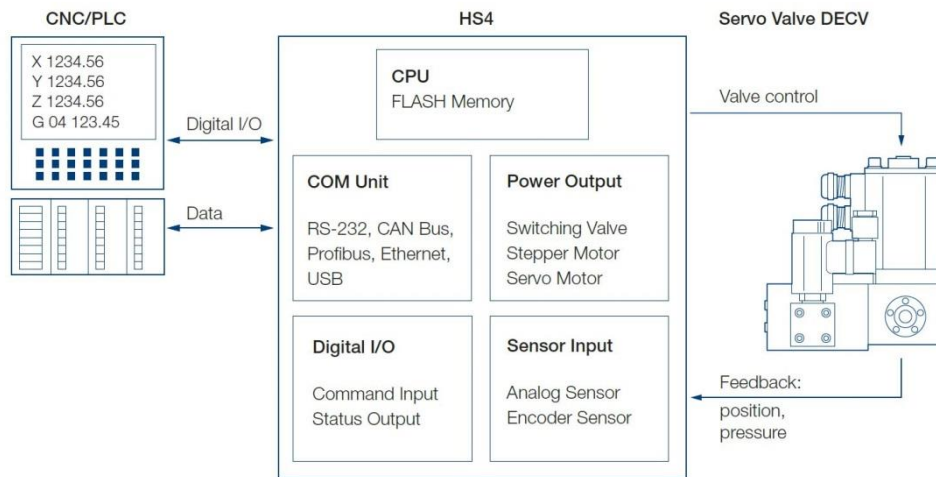
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**Caption 1:** The directly controlled Voith servo valve DECV.



**Caption 2:** Hydraulic Stroke control for punching machines with DECV Valve. The cycle time at a stroke of 4 mm is 18 ms.



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**Caption 3:** System integration and remote maintenance for servo valve DECV.

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Voith Turbo, a Group Division of Voith GmbH, is a specialist for intelligent drive solutions and systems. Customers from highly diverse industries such as oil and gas, energy, mining and metal processing, mechanical engineering, ship technology, rail and commercial vehicles rely on advanced technologies from Voith Turbo.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 39 000 people, generates EUR 5.3 billion in sales, operates in about 50 countries around the world and is today one of the largest family-owned companies in Europe.

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