

## Press Release

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### **Highly dynamic and precise – The new HDE high-performance punch system from Voith**

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With its integrated HDE high-performance punch system, Voith is launching a new generation of punching systems. The HDE was developed specifically for punching, nibbling and forming applications in the high-end segment. It offers convincing performance with high dynamic behavior and precise control mode.

The high dynamic behavior of the HDE is based on newly developed valves as well as intelligent hydraulic and electronic control circuits. With a punch stroke of 4 mm, the new punch system achieves a cycle time of just around 18 ms. The operator benefits from very high machine productivity.

Thanks to the new DECV valves (Direct Electronic Copy Valve), control of the HDE is extremely accurate. The DECV is a directly controlled, electronic copy valve. Direct actuation by a servo motor gives the valve very fast and highly precise impulse response. The HDE achieves a repeatability of up to 0.01 mm, permitting high-precision bending and forming processes. Moreover, the valve is designed to be rugged, compact and very flexible in terms of interfaces – integration into the machine or system could not be simpler.

The load-controlled "two-pressure-system" with separate supply circuits for low pressure and high pressure assures an optimal power balance in the system. Companies using the HDE from Voith will reduce energy consumption by up to 60 percent compared to that of single-circuit systems.

The HDE punch system features additional pressure sensors. The integrated process monitoring provides improved diagnostics. If necessary, the "PunchMaster" software tool can be used to retrieve diagnostic data from the HS4 punch controller via Ethernet from anywhere in the world. Maintenance

nance needs can thus be detected quickly worldwide. This reduces machine downtime; the operator avoids the costs for repairs and service calls.

In the field of punch, nibble and forming drives, Voith is the leading supplier of proven complete systems consisting of hydraulic power pack, control unit with actuator and control electronics with application software. The machinery and drive system are connected using very few interfaces. As a result, control of the hydraulic system is extremely simple.

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**Figure 1:** *The new HDE high-performance punch system from Voith offers convincing performance with high dynamic behavior and precise control mode.*

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

**Voith sets the standards in the energy, oil & gas, paper, raw materials and transportation & automotive markets. Founded in 1867, Voith employs more than 43,000 people, generates €5.7 billion in sales, operates in over 50 countries around the world and is today one of the biggest family-owned companies in Europe.**

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