# Analog Pressure Adjustment System with Pressure Monitoring





#### Application example:

The clamping pressure on a workpiece in the lathes can change even during the machining process. Therefore, a system is required that can adjust the clamping pressure and check it using a sensor.

#### Suitable for:

- Clamping pressure adjustment via machine control
- Clamping processes with multiple pressure adjustment cycles
- Pressure adjustment during machining process
- Pressure adjustment while moving the clamping component
- Maintaining clamping pressure in emergencies

#### **Benefits:**

- Flexible clamping pressure adjustment
- · Reduced cycle times
- · Shorter changeover time
- · Increased safety

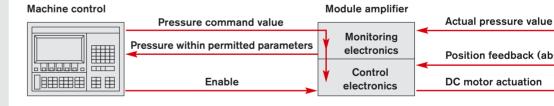
# Everything under Control with the Pressure Adjustment System for Clamping Functions in Machine Tools

#### **Features**

- · Analog command value specified using current or voltage
- Automatically maintains clamping pressure if electrical power supply fails (self-locking actuator)
- · Integrated pressure switch function with simultaneous switch point adjustments due to clamping pressure adjustment
- · Adjustable monitoring limits
- · Enable function as safeguard against unintentional adjustment
- Actuator with absolute positioning (no reference adjustment necessary)
- · No energy consumption in adjusted state
- · Internal monitoring and diagnosis functions

#### **Function**

- · Enable on
- Electrical command value specified from the computer to the monitoring and control electronics
- · Adjustment of the pressurereduction valve by the DC motor actuator due to the command
- Simultaneous adjustment of the switching point
- · Enable off
- Continously monitoring of the pressure within the specified accuracy window and acknowledgement to the machine control

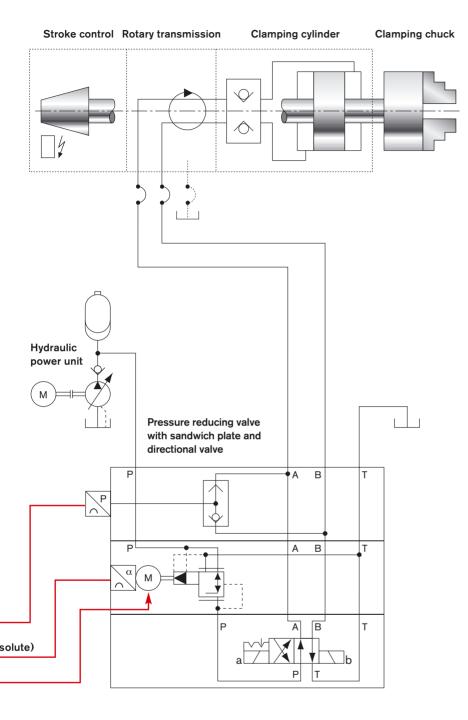


Module amplifier with monitoring and control electronics



3-way proportional pressure reducing valve with motor adjustment and pressure sensor





Sandwich plate with shuttle valve and pressure sensor



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