



# SIMOTION

## Solution for hydraulic presses

Automating hydraulic presses is now even easier and more cost-effective. With our SIMOTION solution for hydraulic universal presses you can use functional, pre-tested modules.

### Benefits:

- Maximum flexibility due to scalable products, systems, and solutions
- One control for electrical and hydraulic axes
- Off-the-shelf function modules
- On-the-fly change between position and pressure control
- Distributed synchronous operation with several controllers
- Cam profiles
- Open application-based solution, can be individually adapted by the OEM.

# metal forming SOLUTIONS

Would you like to utilize a uniform and integrated control technology, from the control of hydraulic equipment right through to electrical drives for transfer?

Then we have the perfect solution for you: With the SIMOTION application modules, you not only increase the cost-effectiveness of your hydraulic presses, but also the flexibility of your production.

Because our SIMOTION solution is as individual as your application.

# SIEMENS

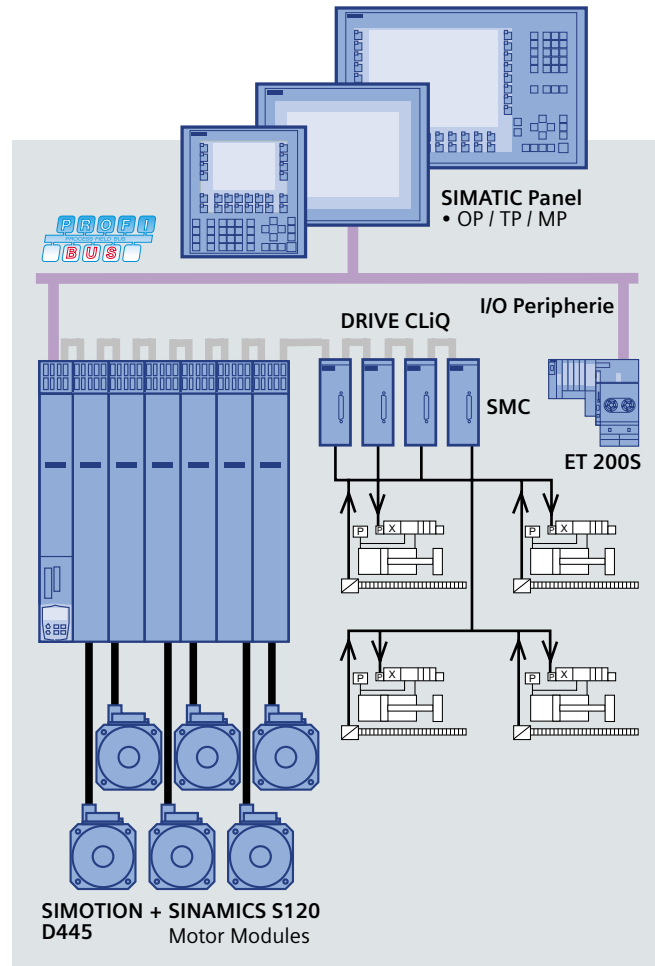
# SIMOTION

## Controlled hydraulic presses

### Overview

With the corresponding degree of automation, hydraulic universal presses can be used in many different applications. They are frequently called CNC presses – but basically all presses with PLCs are CNC presses. Combined with correspondingly sophisticated tools, they can manufacture complex parts. Particular focus in this case is on the protection of the expensive tools, as well as on the acquisition and documentation of production parameters, such as the press force and its trend during the reforming process.

Machine operation with up to 64 electrical or hydraulic axes can be controlled by one SIMOTION controller. Several SIMOTION controllers can be linked. The number of axes can then be multiplied accordingly. A wide range of power and I/O modules can be connected to this control platform. They are linked directly and without time delay with the control via a digital interface. This allows handling equipment and loading/unloading devices to be implemented easily in the same control concept without any problems, e.g. for the closed-loop control of hydraulic axes. Pressure control, synchronous operation of hydraulic and electrical axes, positioning and on-the-fly switchover between position and pressure control for the hydraulic axes are part of the standard range of functions of SIMOTION. Even complex functions, e.g. synchronous traversing of several hydraulic cylinders, are possible with SIMOTION.



Automation example for hydraulic presses

### Highlights of the SIMOTION hydraulic solution

- Valve characteristics can be graphically edited and adapted using the CAM tool
- The hydraulics controller is pre-programmed
- Parameterizing instead of programming
- Synchronous axes can be distributed among several controls
- On-the-fly switchover between position and pressure control
- As many electrical and hydraulic axes as required can be combined
- Due to the interface to PROFIBUS/PROFINET, a wide range of I/Os is available.



Example: HMI screen for hydraulic axes

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