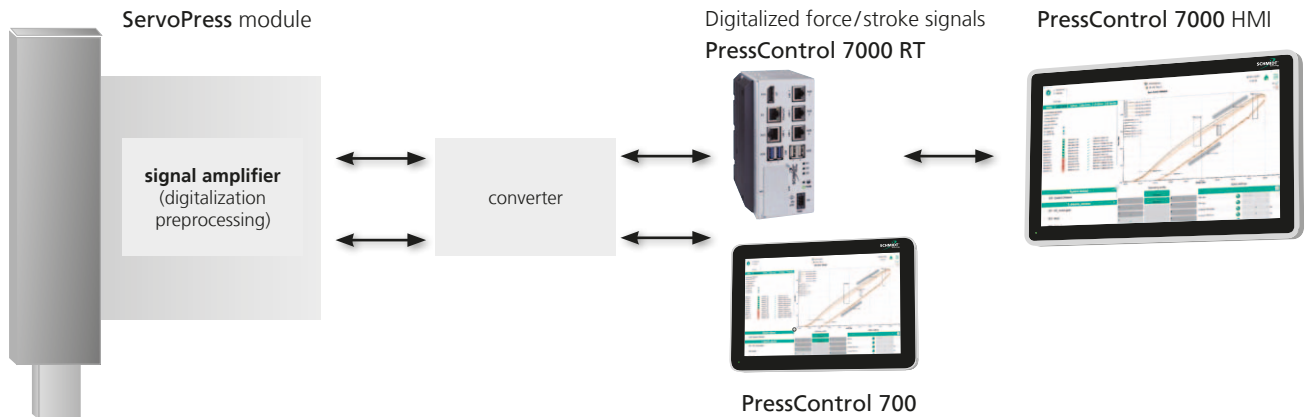


SCHMIDT® ServoPress/TorquePress

Superior controlled behaviour

The combination of a spindle with a servo drive is not sufficient to achieve optimum joining results. The key for intelligent assembly is quick and exact controlled behaviour of the press. This requires an integrated system consisting of drive unit, process measure-

ment technology and control unit. These requirements have been taken into account in the system architecture of a **SCHMIDT® ServoPress /TorquePress**.



SCHMIDT® ServoPress/TorquePress modules operate with a true force control loop (force as a command variable).

That means:

- fast approach of the target values
- no overshooting of the target values
- precise positioning in the 1/100 mm range even with strongly fluctuating press-in forces
- highly accurate, continuous force control
- the control parameters can be adjusted
 - optimal adaptation to your application
 - no programming necessary
 - the system works with pre-set optimal acceleration values (no incorrect inputs possible)
- optimization of process times possible by additional graphical display. Force / time [F/t], and stroke / time [s/t] for analysis of the control behavior. The classic force / stroke [F/s] display of conventional electric axes is not comparable with the convenient recording and visualization options of the ServoPress / TorquePress
- stable closed loop force control over a long period of time
- no over or under oscillation (no vibrations) during the control process

These properties are achieved by combining the following features:

- integrated measurement technology (Sample rate 2000 Hz)
 - backlash-free displacement recording, force measurement without transverse forces
- amplification of the process signals at the **SCHMIDT® ServoPress** module
 - insensitive to electromagnetic interference (EMI)
 - closed-loop control takes place in **SCHMIDT® PressControl 700** or **PressControl 7000RT**, i.e. servo amplifier and motor receive the targets from the control system
 - optimized PLC control algorithm for external references
 - force [F], stroke [s] or other external reference parameters are processed simultaneously during the process.
 - the reference variables can be freely defined
- fast signal processing on software-based PLC with integrated CNC

