



## Mechatronics

Mechatronics trainer combines the basic technologies of Sensorics, Pneumatics and Programmable Logic Controller in one unit.

All actuator and sensor signals brought together and serially conveyed via Profibus DP to a PLC. The modular design permits the incorporation of further subassemblies into the system at any time. The trainees are directed through the various stages, starting with individual subassemblies and gradually building up to being able to master the complete system functionality. This means that motivation is sustained as the trainees accomplish continual successes at each stage.

The system consisting of 3 individual stations facilitates learning of product processing and product assembly in a realtime environment.

The system is based on a cube assembly and is divided into three stations:

- > Magazine
- > Processing with pneumatic or hydraulic presses
- > Storage

### Fundamentals of Mechatronics

Observing, analysing and documenting |  
PLC Programming | Programming for  
pneumatic press | Electrical Circuit  
diagrams | Commissioning |  
Troubleshooting | Safety measures

### System Specification

- PLC Type: L20 DP Modular «
- Supply Voltage: 220V AC/ 24V DC «
- Digital Input / Outputs: DI 16 and DO 16 «
- Analog Input / Output: AI – 2, AO-2, «  
AI – 8/SF - PAC, AO-2/SF- PAC
- Communication Interface: Ethernet «  
TCP/IP, Profinet and Sercos III «
- Pneumatic Actuation System «