Our new all-rounder: MPS 403-1
One learning system for mechatronics and Industry 4.0

FESTO

Highlights

- Easy access to the most important Industry 4.0 topics
- Comprehensive learning material enables structured and flexible teaching
- Learning support through AR and QR technology
- Easy to understand teaching of complex topics such as HMI, network technology, RFID, and smart sensors

Industry 4.0 and mechatronics

MPS 403-1 is not only an I4.0 learning system, but also the perfect environment for training basic competencies and profound technical knowledge in the field of automation technology and mechatronics. The miniature production line provides a deep insight into intelligent networking of machines in the production environment and their processes.

A didactic MES with web shop integration, learning contents such as IoT retrofitting based on RaspberryPi, touch panel programming and artificial intelligence with machine learning algorithms support instructors in teaching a broad spectrum of modern I4.0 technologies.

Didactic MES

The didactically prepared, web-based software environment, which is used to control and monitor the system, can be operated via a large touch display and a keyboard.
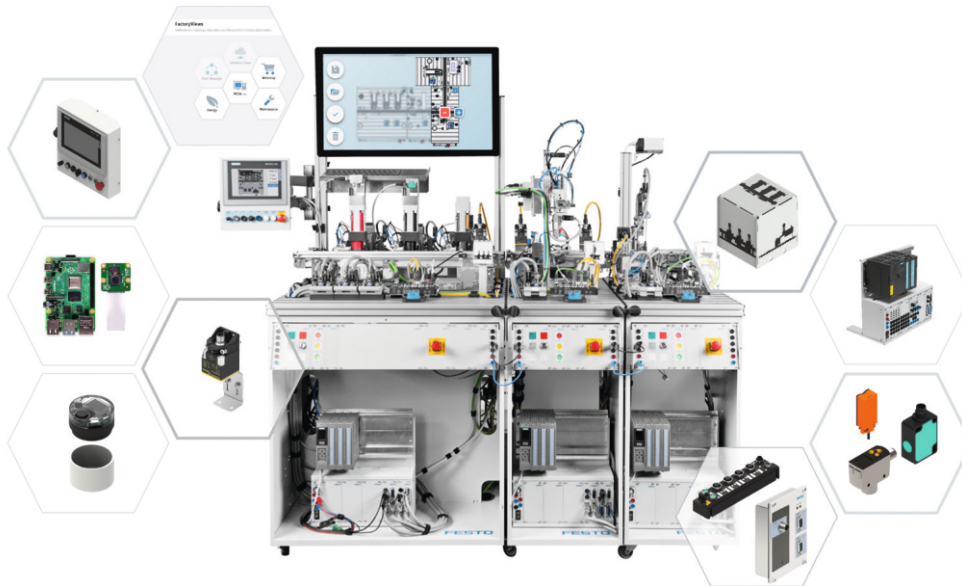The center of the whole software landscape is a specially developed MES, which meets the specific requirements of didactics, as it is particularly designed for teaching and learning purposes.

The software environment can be extended by further didactically designed applications. Depending on the role and learning scenario, different information is displayed to the user and prepared accordingly.

i4.0

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One learning system for mechatronics and Industry 4.0

One learning system for all professions and job roles related to mechatronics and Industry 4.0

Addressed learning contents

- Basics of mechatronics and automation technology
- Programming of industrial touch panels
- Integration of intelligent Sensors on IO-link basis
- Industrial communication protocols like OPC-UA
- New business models through industrial IoT retrofitting
- Artificial Intelligence and Machine Learning using the example of image processing
- Networking of several stations in an MES environment
- HMI using the example of augmented reality and web interfaces
- Integration of RFID and network technology
- Manufacturing of customer-specific products
- Connection of web shops to production facilities

Learning support

We offer extensive learning material in print and online media which fits perfectly with the MPS 403-1. Our modular hardware and courseware structure enable flexible learning paths, which can be individually adapted to the desired competencies to be trained.

The learning process is supported by Augmented Reality (AR). Optical markers such as QR codes and AR markers enable the learner to quickly and specifically retrieve relevant technical information on the current learning unit or module.

Extensibility

As usual, you have the possibility to expand the MPS learning system with new learning content by adding further stations.

Depending on your requirements, optional add-on packages can be purchased to open up further learning fields and technology areas such as IT security, energy management, AC drives, machine safety and mobile robotics.