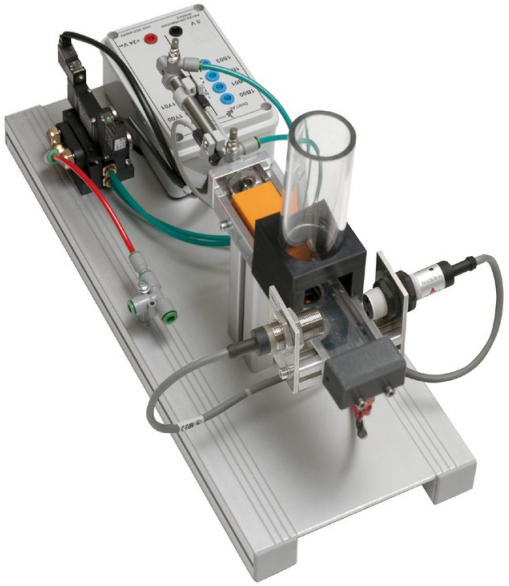
PIECE IDENTIFICATION AND DISTRIBUTION MODULE

Mod. MCE-500/EV

Mod. MCE-500/EV allows to recognize and distribute cylindrical pieces according to their material. A piston pushes the pieces from a vertical ramp to an identification cell. Industrial sensors detect the pieces on the ramp and identify their material.

The module is assembled on a sectioned aluminium base, and it can be easily moved around the laboratory.

Mod. MCE-500/EV can be fully controlled using a PLC module or an Arduino microprocessor. Thanks to the PLC or Arduino programming software, a wide range of exercises regarding the automation of the module in a working cycle or in stand-alone mode can be developed.



TRAINING PROGRAM

- Fundamentals of Electro-pneumatics
- Piece distribution methods
- Operating an electrovalve
- Operating a set of automated sensors
- Operating a pneumatic cylinder
- PLC control
- Microprocessor control

TECHNICAL SPECIFICATIONS

Modular unit assembled on a sectioned aluminium structure. It includes an I/O interface box with Ø 2 mm terminals that, besides working as control board for the module, enables the students to carry out electrical measurements on its components.

The module can be operated using:

- No. 1 PLC training panel mod. PLC-V8/EV, or
- No. 1 Arduino training panel mod. MPC-18/EV

Power supply (24 Vcc) is provided by the PLC itself or using a MPC-18/EV module.

Sensors and actuators:

- No. 1 Retro-reflective photoelectric sensor
- No. 2 Magnetic sensors
- No. 1 Capacitive sensor
- No. 1 Inductive sensor
- No. 1 Micro-switch
- No. 1 Bistable electrovalve
- No. 1 Microcylinder (piston)

Module inputs and outputs:

- No. 6 Digital inputs
- No. 2 Digital outputs

Dimensions: 160 x 400 x 270 mm
Weight: approx. 5 kg

REQUIRED UTILITIES (PROVIDED BY THE CUSTOMER)

- Compressed air supply: 5…6 bar

SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK
Presentation of the equipment, experiments, technical specifications with electric and pneumatic diagrams, use and maintenance.