# PIECE THICKNESS MEASUREMENT MODULE

Mod. MCE-520/EV allows to sort pieces according to their thickness. The measurement is carried out by a sensor whose output voltage is an analog signal between 0-10 V. The piece is carried upwards and pressed against the sensor in such a way as to determine its thickness according to the output voltage. When the piece fits the pre-set parameters it is released in the first slide, otherwise it is discarded in the second slide.

Mod. MCE-520/EV

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

Mod. MCE-520/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 selection methods
- Operating an electrovalve
- Operating a set of automated sensors
- · Operating a microcylinder
- · Operating a rodless cylinder
- PLC control
- · Microprocessor control

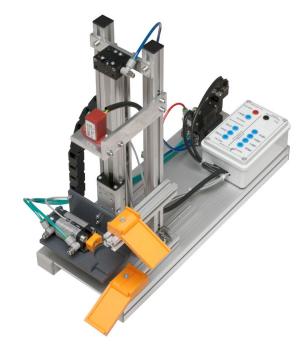
## **TECHNICAL SPECIFICATIONS**

Modular unit assembled on a sectioned aluminium structure. It includes an I/O interface box with  $\emptyset$  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 Linear potentiometer
- · No. 4 Magnetic sensors
- No. 1 Monostable electrovalve
- No. 1 Bistable electrovalve
- No. 1 Rodless cylinder (slide effect)
- No. 1 Microcylinder (piston)

Module inputs and outputs:

- No. 4 Digital inputs
- No. 3 Digital outputs
- No. 1 Analog output

**Dimensions:** 160 x 400 x 270 mm **Weight:** approx. 4.4 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.

