

AUTOMATED PRODUCTION LINE

PIECE IDENTIFICATION, THICKNESS MEASUREMENT AND STORAGE

Mod. MCE-B1/EV

The **MCE-B1/EV** line includes several MCE mechatronic modules that simulates an industrial automated process. Piece identification, thickness measurement and storage are managed and supported by a swivel arm.

The educational objective is to broaden the student's knowledge in programming and testing an industrial manufacturing line.

The **MCE-B1/EV** system is composed by the following elements:

- Modules
 - N. 1 MCE-500/EV - Piece identification and distribution module
 - N. 1 MCE-510/EV - Swivel arm module
 - N. 1 MCE-520/EV - Piece thickness measurement module
 - N. 1 MCE-530/EV - Linear storage module
- Accessories
 - N. 1 ATZ/EV - Box of tools and workpieces

WORKING CYCLE

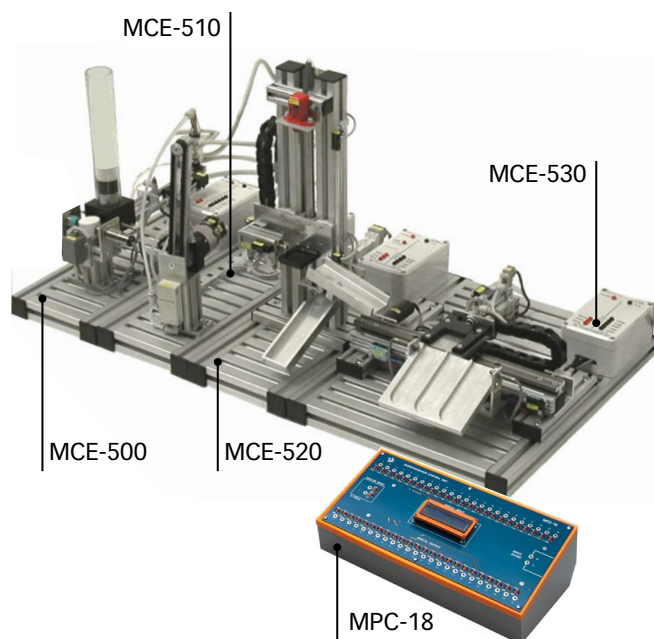
The working cycle can be described as follows:

1. The piece is expelled from the distributor
2. The swivel arm picks and handle the piece
3. Inductive and optical sensors identify the piece; if the piece is compliant, it is transferred to the next station
4. The piece is stored according to the tests carried out in the previous stations

SYSTEM FEATURES AND MANAGEMENT

For system operation a **microprocessor module (not included) is essential** to manage the resources described below:

System units		I/O needed			
Q.ty	Mod.	D.I.	D.O.	A.I.	A.O.
1	MCE-500	6	2	-	-
1	MCE-510	2	3	-	-
1	MCE-520	4	4	1	-
1	MCE-530	7	3	-	-
TOT System		19 D.I.	12 D.O.	1 A.I.	-



Recommended control modules (not included):

- No. 1 Arduino training panel mod. **MPC-18/EV** with programming and simulation software included (IDE format), or
- No. 1 PLC training panel mod. **PLC-V8/EV** with no. 1 I/O Expansion module mod. **V8-1/EV**, or
- No. 2 PLC training panels mod. **PLC-V8/EV**

Connection to the other modules is carried out via 2 mm sockets

Tot size: 1200 x 640 x 400 mm (approx)
Weight: 17 kg

OPTIONAL

- **SILENCED COMPRESSOR** Mod. 3409A
- **WORKING TABLE** Mod. TOP/EV
- **ROBOT ARM GRIPPER** Mod. GRIP/EV

SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK
 For each mechatronic module

