

AUTOMATED PRODUCTION LINE

PIECE HANDLING AND MULTIPLE SELECTION

Mod. MCE-A1/EV

The **MCE-A1/EV** line includes several MCE mechatronic modules that simulates an industrial automated process. Piece selection and handling are managed and supported by a robot arm.

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

The **MCE-A1/EV** system is composed by the following elements:

- Modules
 - N. 1 MCE-705/EV - Conveyor and multiple selection module
 - N. 1 NDIDA/EV - Robot arm
- Accessories
 - N. 1 ATZ/EV - Box of tools and workpieces



WORKING CYCLE

The working cycle can be described as follows:

1. The robot arm picks and handle the piece
2. The piece is laid on the conveyor belt
3. The conveyor belt starts rolling and the piece is identified by inductive and optical sensors
4. A pneumatic device stores the piece in the selected warehouse

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-705	4	3	-	-
1	NDIDA	1	1	-	-
TOT System		5 D.I.	4 D.O.	-	-

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**

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

Tot size: 1000 x 640 x 900 mm (approx)
Tot weight: 15 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

