

AUTOMATED PRODUCTION LINE

PIECE DISTRIBUTION AND UNLOAD

Mod. MCE-C1/EV

The **MCE-C1/EV** line includes several MCE mechatronic modules that simulates an industrial automated process. Piece distribution and identification 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-C1/EV** system is composed by the following elements:

- Modules
 - N. 1 MCE-500/EV - Piece identification and distribution module
 - 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

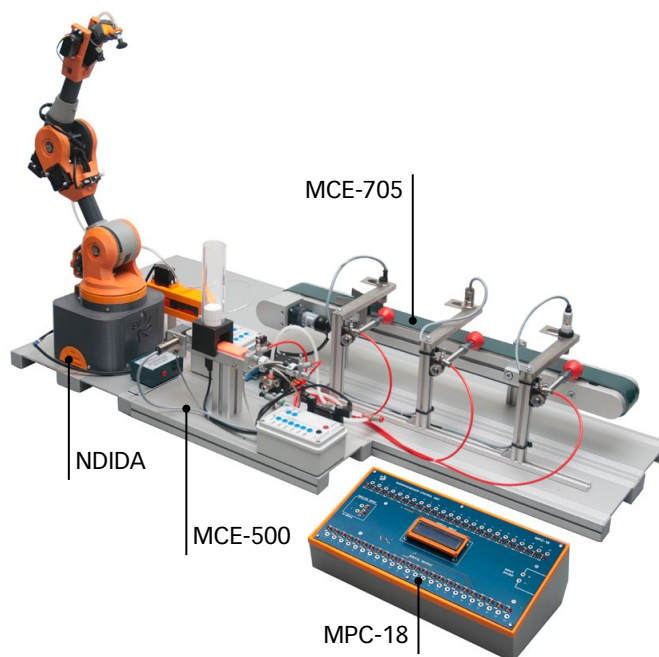
The working cycle can be described as follows:

1. The piece is expulsed from the distributor
2. The robot arm picks and handle the piece
3. The piece is laid on the conveyor belt
4. The conveyor belt starts rolling and the piece is identified by inductive and optical sensors
5. A piston unloads the piece from the conveyor

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-705	4	3	-	-
1	NDIDA	1	1	-	-
TOT System		11 D.I.	6 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: 1200 x 640 x 900 mm (approx)
Weight: 20 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

