



ErmaSmart #B

Curved conveyor for 90° connection

Ermasmart pot or box/pallet direction change system.

Description of the system

The **Curved Conveyor** system is a **stand-alone system** that **creates** a 90° link to reduce the linear footprint of the Ermasmart line. It incorporates a **modular belt system** that is widely used in industrial packaging operations for all types of products. The functions and components are based on real industrial components used in the food, pharmaceutical or cosmetic industry (jars/vials),

This **Curved Conveyor** system for 90° link (ref **CE42**) designed in the spirit of the **packaging industry** meets the main requirements on intelligence and evolution of production methods:

- ✓ **Flexibility & Customisation** with the possibility of packaging customised items to the customer's order.
- ✓ **Speed variation.**

This **automated** system can be **used on the Ermasmart line** with different pots or cans/pallets, but can also be **integrated with other conveyors.**

The **main functions of the Curved Conveyor** are:

- ✓ **Conveying** the made objects (different sizes of pots or boxes/pallets) on a 90° trajectory
- ✓ **Carry out** maintenance activities on mechanical parts.

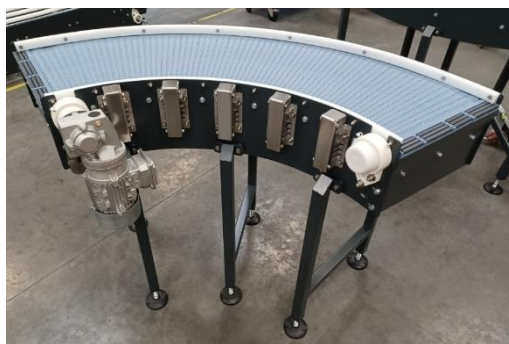
This training system is mainly intended for **system control, industrial maintenance, electrical engineering, automation and mechanical** training.

This product is accompanied by a technical and educational file in digital format.

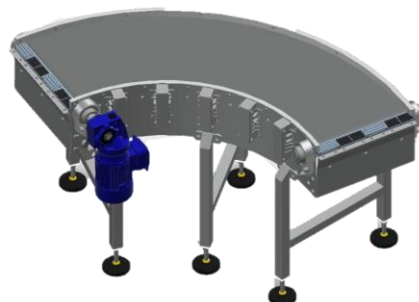
CAP CIP - Bac PRO PLP / MELEC / MSPC
BTS CRSA / Electrical engineering / MS
IUT - Universities - Engineering schools

Main Themes

Industrial Maintenance
Production Control
Multi-technology Systems Design
Electrical Engineering and Automation



Lien viewer 3D



General

The **Curved Conveyor for 90° link** (Ref: **CE42**) is mainly composed of :

- ✓ A welded frame with epoxy paint on 6 height-adjustable castors to adapt to different conveyor heights.
- ✓ A modular PVC belt.
- ✓ An electrical box attached to the chassis.
- ✓ A 230/400V motor controlled by its drive, which will be the subject of a position change activity.
- ✓ Mechanical parts (bearings, modular belt) that will enable the creation of maintenance activities.

Educational activities

The **Curved Conveyor System for 90° linkage** allows the following educational activities, among others:

✓ Electrical engineering

- **Discovery and handling of the system** (functional analysis and study of system technologies)
- **Control of the system's electrical parameters** (network, power supply, drive)
- **Commissioning and validation of system operation**
- **Adjustment and parameterisation of the installation** components (three-phase asynchronous motor and its

frequency converter).

✓ Industrial maintenance

- **Preventive maintenance:** Replacement of one or more links in the modular belt, bearing change, lubrication and reference search.
- Changing the position of the motor

✓ Mechanics

- Change of motor position with possibility of rewiring according to the direction of rotation of the conveyor.