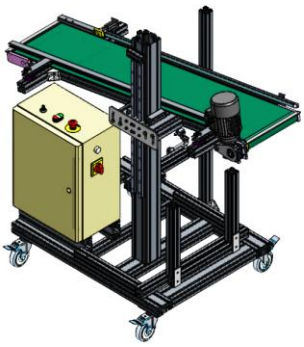
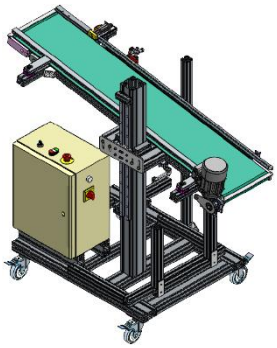
# AMR050

# MOTORISED AMR OUTFEED ADAPTER KIT (Autonomous Mobile Robot)









## TRAINING APPLICATIONS

- **Activities involving the integration of an automated solution at the conveyor outlet of an existing training machine (for filling, inspection, packaging, etc.), to transfer work in progress onto our latest-generation versatile AMR100 Autonomous Mobile Robot.**
- **Numerous mechanical adjustments to suit product dimensions and differences in height between the production machine and the AMR robot.**
- **Programming a PLC for a given application.**
- **Creating an operating GRAFCET sequence chart.**
- **Configuring a Wi-Fi communication unit and a variable frequency drive.**
- **Maintenance of an automated conveyor system with flow management using pneumatic actuators (mechanical, electrical and pneumatic components).**

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# AMR050

## OPERATING PRINCIPLE

The AMR050 kit is a fully self-contained automated system that connects our versatile AMR100 robot to an existing machine without modifying the machine.
It offers numerous mechanical adjustments to suit:

- The different types of products (plastic bins, boxes and parts of various shapes, 30 to 300 mm wide and up to 600 mm long) to be transferred directly onto the conveyor on our versatile AMR100 robot; small parts can be dropped into a bin placed on the conveyor beforehand.
- Differences in conveying height (600 to 1200 mm, inclination up to -20°/+20°) between your machine's conveyor and that of our mobile robot. The robot conveyor also has adjustable height and width so that products can subsequently be delivered at the required height.

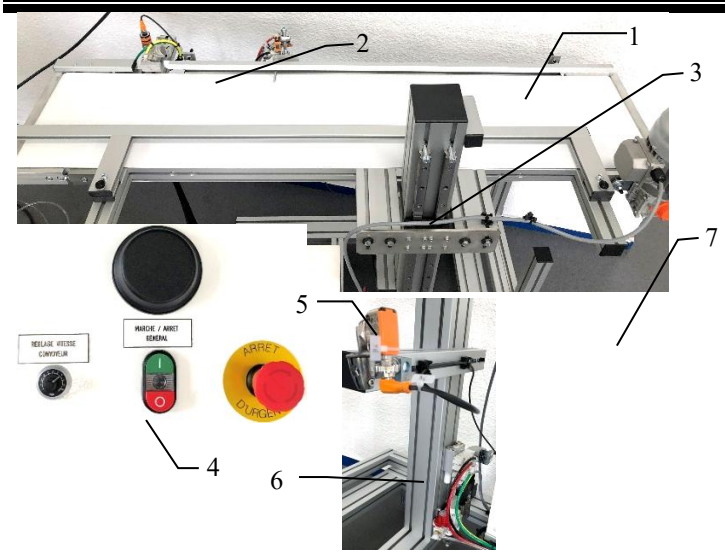
This conveyor has an adjustable metering system with pneumatic cylinders to hold back the production flow and release a product when the mobile robot is correctly positioned in front of it. A variable speed drive adjusts the conveyor speed.
Wi-Fi communication between the PLC, the AMR robot and numerous IO-Link sensors (optical sensors, pressure switches and reed switches).

Reference programs incorporating factory settings are provided to allow you to reset the machine at any time.

The robust design of this equipment makes it particularly suitable for use in educational environments.
Its anodised aluminium frame on castors provides excellent strength and great flexibility for installation on your premises.
This equipment is manufactured in accordance with the European Machinery Directive.

This equipment can be used on its own or with other compatible equipment in our range (see the final section of this document).

## Illustrations




## Technical specifications

1. PVC belt conveyor with width-adjustable side guides.
2. Production flow control system consisting of pneumatic cylinders and sensors with adjustable position along the conveyor
3. Main column with double ball-bearing slide for adjusting conveyor height and inclination.



4. Control panel and external Wi-Fi antenna.
5. Optical sensor for monitoring the presence of the AMR robot correctly positioned at the conveyor outlet
6. Filter-regulator-lubricator (FRL) unit with soft-start pressurisation and pneumatic valve manifold.
7. Electrical enclosure with PLC, variable speed drive, Wi-Fi unit, etc.

## Installation requirements

- Electrical supply: 230 Vac – 50 Hz – 10 A
- Electrical supply type: 1 phase + Neutral + Earth.
- Compressed air supply: 6-8 bar (dry, oil-free air)
- Dimensions (L × W × H, mm): 800 x 600 x 1100
- Weight (kg): 50

Note: If the equipment is installed by our team, all utility connections must be located within 2 m of the machine.

## Documentation

- Instruction manual
- Full technical documentation
- Example PLC program
- Electrical diagram
- Pneumatic diagram
- CE certificate of conformity

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## Compatible additional equipment

| | |
|---|---|
| • Gravity accumulation roller conveyor with 32 mm pitch for transferring flat-bottomed objects. | • Ref : AMR010 |
| • Fixed workstation made of anodised aluminium profiles, tailored to your environment. | • Ref : AMR015 |
| • Complete kit enabling the AMR100 robot to deliver products to the conveyor inlet of your existing machine. | • Ref : AMR020 |
| • Versatile Autonomous Mobile Robot equipped with a conveyor with adjustable height and width. | • Ref : AMR100 |

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