
Autonomous Mobile Robots (AMRs)

Intelligent vehicles that navigate the warehouse independently to automate and streamline the internal transport of goods.



Maximum flexibility in automating flows of goods

Autonomous mobile robots (AMRs) are vehicles designed to transport loads between two points independently. They navigate the warehouse freely based on dynamic routes generated by intelligent software. This software optimises the movements of the AMRs, assigning the perfect route for each task. Through the use of state-of-the-art sensors and scanners, AMRs are capable of identifying and evading obstacles. They can operate safely in collaborative environments alongside other machines as well as people.

AMRs are highly versatile devices that integrate seamlessly into all types of warehouses, requiring no modifications to existing infrastructure.



Advantages of AMRs



Autonomous

AMRs navigate freely, orienting themselves by means of virtual maps. They are not confined to predefined paths or closed-loop, delineated navigation circuits.



Intelligent

They follow routes generated by navigation software, which calculates the most efficient path. These robots detect and avoid all kinds of obstacles — fixed or moving — readjusting their route in real time.



Flexible

AMRs adapt perfectly to the warehouse layout, making for a fast and easy implementation.



Efficient

Fleet management software oversees robot traffic and anticipates routes to assign each task to the ideal AMR.



Scalable

The fleet can be expanded simply by adding new robots to accommodate a company's operational growth or seasonal demand peaks.



Accurate

These machines execute their tasks with the highest precision, significantly reducing errors and boosting warehouse efficiency.



Safe

A series of highly accurate collision avoidance sensors and scanners make all AMR movements stable and reliable.

Mecalux's AMRs cater to various intralogistics transport requirements.



AMR 600 Rack

Specifically designed to transport shelves, fostering shelf-to-person picking.

Maximum payload: 600 kg

Movements: autonomous navigation, load lifting and load rotation



AMR 100 Box

Ideal for transporting boxes, totes, bins, trays and packages. This AMR is equipped with a completely configurable upper conveyor for transferring loads.

Maximum payload: 100 kg

Movements: autonomous navigation



AMR 100 Multi-Box

Integrates perfectly with collaborative picking scenarios, supplying pick stations and accompanying operators (follow-me mode).

Maximum payload: 100 kg

Movements: autonomous navigation



AMR 1500 Pallet Conveyor

Designed for safe, controlled in-house pallet movements. This AMR is equipped with an upper conveyor for transferring loads.

Maximum payload: 1,500 kg

Movements: autonomous navigation



AMR 1500 Pallet Lifter

Transfers pallets using a lifting platform integrated into the robot's upper surface.

Maximum payload: 1,500 kg

Movements: autonomous navigation and load lifting

AUTONOMOUS MOBILE ROBOTS (AMRs)

Robotic solution designed to optimise multiple intralogistics operations



Person-to-goods picking



Goods-to-person picking



Pallet flows



Outbound operations



Production supply



Mecalux has commercial offices in 23 countries

Argentina · Belgium · Brazil · Canada · Chile
Colombia · Croatia · Czechia · France · Germany
Italy · Mexico · Netherlands · Poland · Portugal
Romania · Slovakia · Slovenia · Spain · Turkey
UK · Uruguay · US

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