

Driving the next
generation of
mobile robotics.



AUTONOMOUS MOBILE ROBOTS

The widest range of solutions





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Driving the next generation of mobile robotics

About us

ABB Robotics & Discrete Automation is a pioneer in robotics, machine automation and digital services, providing innovative solutions for a diverse range of industries, from automotive to electronics to logistics. As one of the world’s leading robotics and machine automation suppliers, we have shipped more than 500,000 robot solutions. We help our customers of all sizes to increase productivity, flexibility and simplicity and to improve output quality. We support their transition towards the connected and collaborative factory of the future.

With the acquisition of global AMR leader, ASTI Mobile Robotics Group, ABB is the only company to offer a complete portfolio for the next generation of flexible automation, from production to logistics to point of consumption, which gives us a truly unique value proposition for our customers. ABB Robotics & Discrete Automation employs more than 11,000 people at over 100 locations in more than 53 countries.

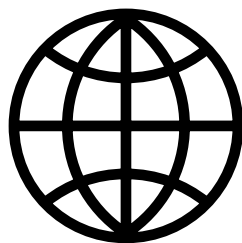
— abb.com/robotics



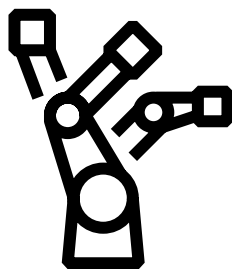
~11,000
Employees worldwide



100+
Locations



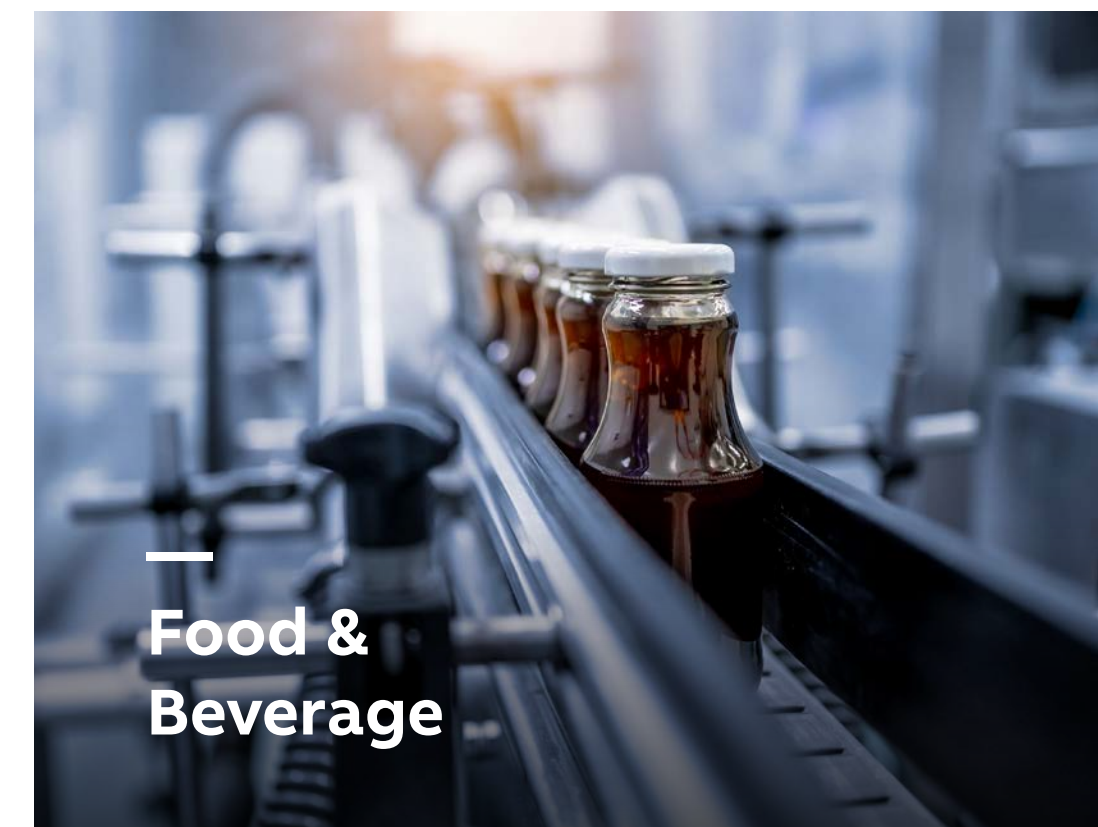
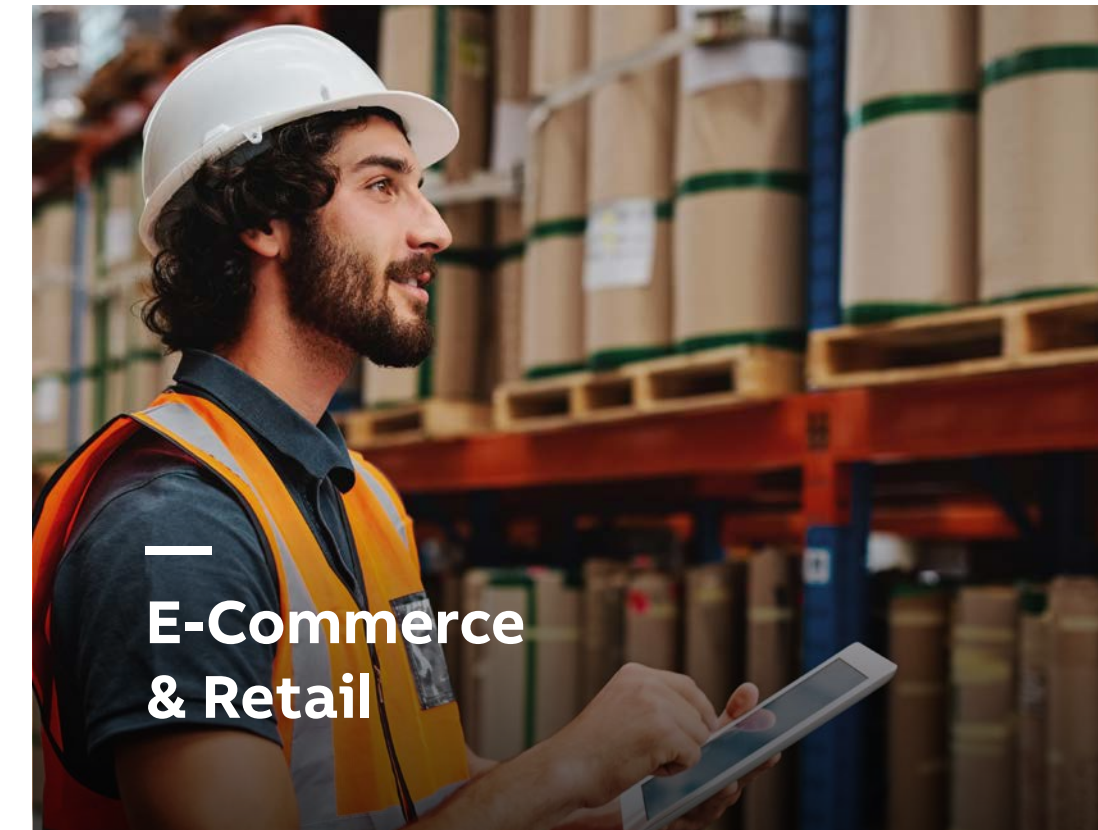
50+
Countries



500,000
Robot Solutions

Sectors of operation

At ABB Robotics, we put our experience, technology and know-how at the service of your industry. Our mobile robotics solutions cover the entire value chain, and perfectly meet the intralogistics needs of the new connected industry.



Product portfolio

Flexley Tug

- AMR T401
- AMR T411
- AMR T412
- AMR T701
- AMR T702
- AMR T801
- AMR T901



Flexley Mover

- AMR P103
- AMR P204
- AMR P304
- AMR P604



Flexley Stack

- AMR F203
- AMR F602
- AMR F702



Flexley Tug

Flexley Tug AMRs are used for pulling trolleys. Epitomized by its ease of use and proven performance, these mobile robots enable easier optimal performance which leads to high productivity and lower operating costs in your intralogistics operations. Our range offers compact and intelligent mouse AMRs, and tractor AMR for up to 10 tonnes to pull several trolleys at the same time.

Our Flexley Tug robots provide an easy to install, easy to operate, and easy to maintain solution. Our new evolution 2.0 also integrates SLAM navigation technologies, faster charging systems and increased load capacity.



AMR T401



AMR T701



AMR T801



AMR T411



AMR T702



AMR T901



AMR T412



Flexley Mover

With smart navigation technology combined with software intelligence, this line of platform AMRs can perform multi-origin and multi-destination operations to meet the rigorous demands of your logistics processes.

Flexley Mover AMRs can transport loads on top such as containers, pallets or trays from 50 to 1500 kg. They can automate a wide range of logistics and manufacturing tasks, like goods to robot applications, production lines or interprocess connection



AMR P103



AMR P204



AMR P304



P604



Flexley Stack

High-quality forklift AMRs to improve your productivity and competitiveness. Flexley Stack mobile robots are an excellent choice for handling pallets and containers in manufacturing and distribution plants.

This wide range of laser-guided multipurpose vehicles guarantees totally safe operations. Our AMRs include counterbalanced and stacker models, as well as different configurations to offer the perfect solution for your project.



AMR F203



AMR F602



AMR F702



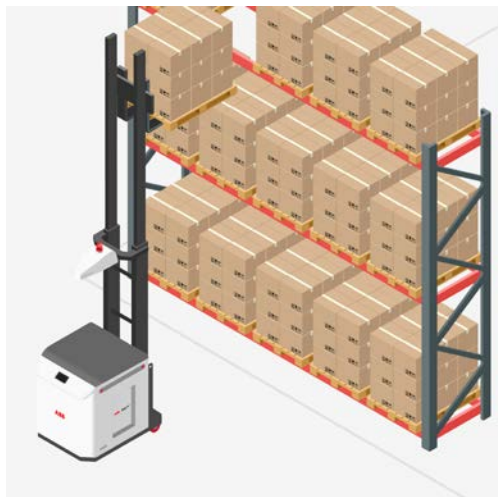
—
We have solutions that adapt
to your internal logistics flows
to increase your competitiveness,
efficiency and flexibility.



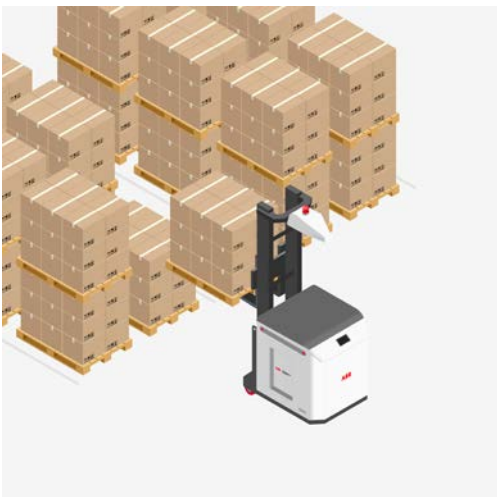
Applications

Our mobile robots are perfect to automate the transport of a wide range of loads and applications in different environments.

Storage operations

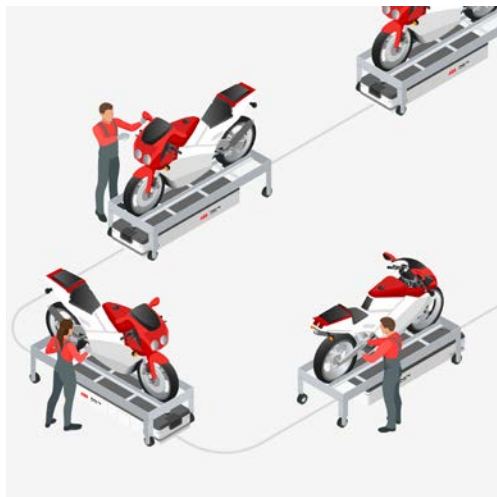


Vertical operations

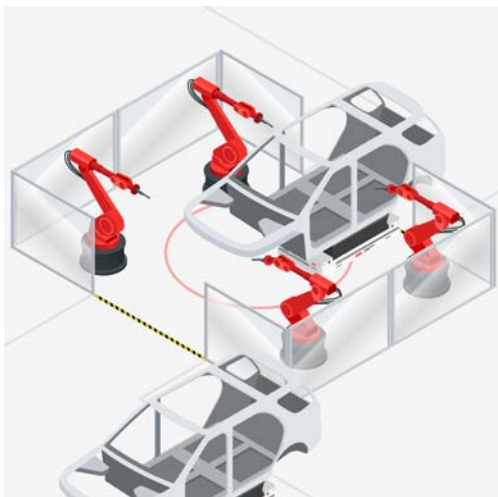


Reception & Shipment

Production flows

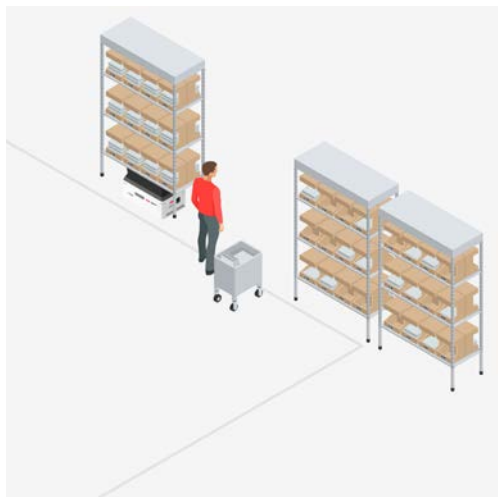


Assembly & subassembly

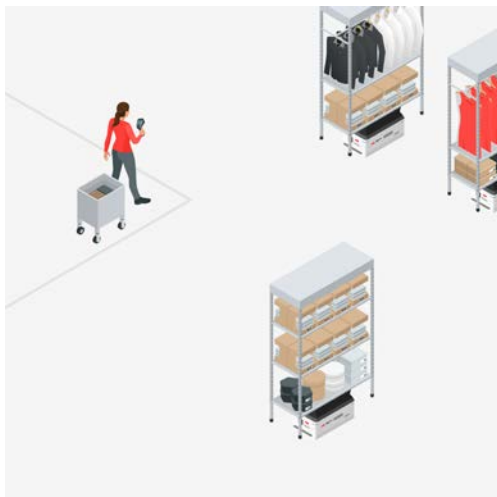


Robot cells

Goods to person

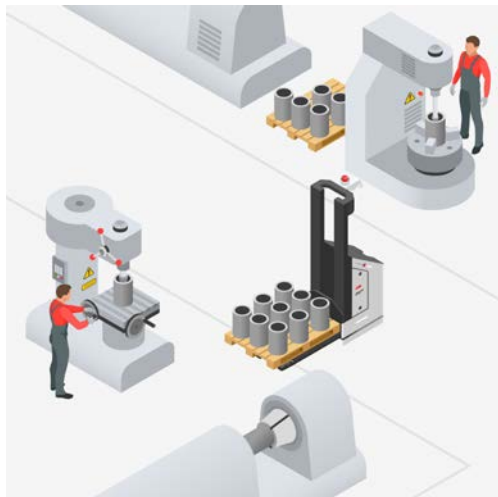


Picking & Putaway



Multi-SKU management

Material handling



Line operations

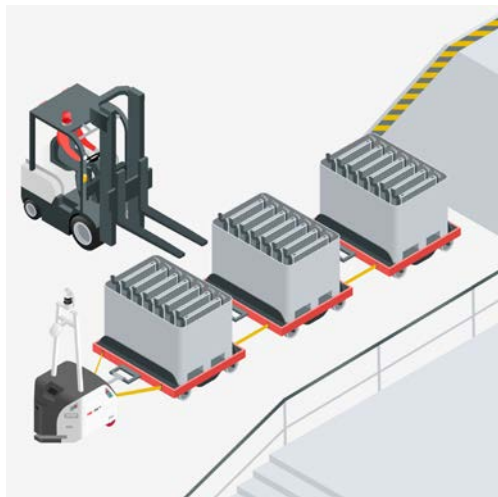


Kitting

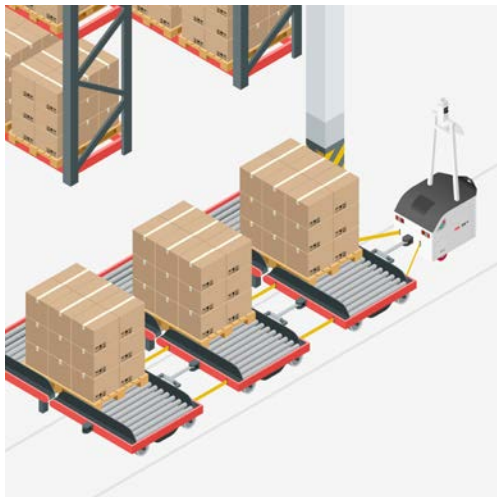


Auxiliary flows

Logistics trains



Milk run



Horizontal transport

Our AMRs integrates cutting edge technology to provide a totally safe and flexible automation.





AMR technology

ABB Robotics is an expert in industrial processes, connectivity, and customer support.

Navigation systems



Precise, reliable and flexible navigation systems

Our different technologies can be used for vehicle location and navigation throughout the installations.

- Magnetic navigation
- Laser navigation
- QR navigation
- SLAM-Natural navigation
- Dual navigation

Safety systems



At ABB Robotics, people come first

Autonomous mobile robots are collaborative robots that move safely within industrial areas, coexisting with humans and manually-operated trucks. At ABB Robotics, people come first, so we ensure that all of our products meet the most strictest safety regulations.

- Safety laser scanner
- Safety PLCs
- Warning systems
- Load sensors
- Fork tip sensors
- Photocells and bumpers
- Emergency stop buttons

Battery and Charging systems



Our full line of energy systems

Provides an efficient charging strategy and powerful batteries to ensure the autonomy our AMRs need to operate

- Batteries
- Li-Ion
 - Lead-Acid

- Charging systems
- Manual battery interchange
 - Online charging

Software systems



Move your AMRs at the pace of your facility with our software solutions

ABB’s AMR software systems allow us to connect our vehicle fleets to your systems and ensure a seamless integration between our vehicles and your plant.

The software system is divided into different modules, which are each responsible for different tasks. Our Fleet Management System (FMS) is responsible for the orders to be carried out by our AMRs in the most efficient way. Additionally, our traceability manager keeps track of all events, anomalies, orders and signals to enable you to make informed decisions about the AMR system.

Our AMRs are equipped with
a full range of safety systems.



Monitoring system for smart factories

Today, ABB is not only an enabler of Industry 4.0, but also a manufacturer of connected products with a clear strategy to offer its customers more and better connectivity and integration services, predictive maintenance or performance analytics.

DISCOVER OUR MONITORING SYSTEM

ABB’s monitoring system provides with live web-based visualization of the AMR system. Together with events, anomalies, orders and signals, it allows customers to have full control of what is happening on the shop floor. With this data, the performance of the system can be monitored and any deviations can be quickly detected.

Live feedback

Continuous information on what is happening in the plant at all times: from AMR movements to possible anomalies or events.

Data first

Data-driven decision-making through KPI dashboards that help our customers track performance and make informed maintenance choices.

Easy to use

Graphic User Interface which is designed in a user-centered approach, making it easy to use for anyone with basic knowledge of AMRs.

Flexibility

Different functionalities which adapt to your needs: from basic visualization to an advanced plan with FMS (Fleet Management System) interactions.



AUTONOMOUS MOBILE ROBOTS



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