

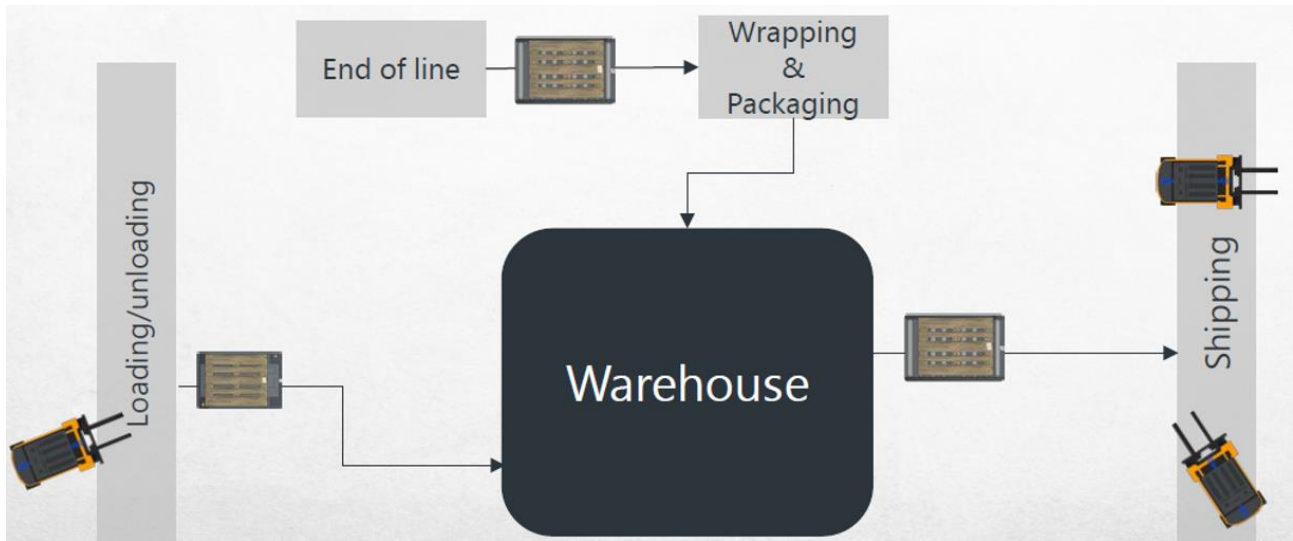
Transport systems for factory automation

Modular Vehicle Selection Guide
With Reference Workflows

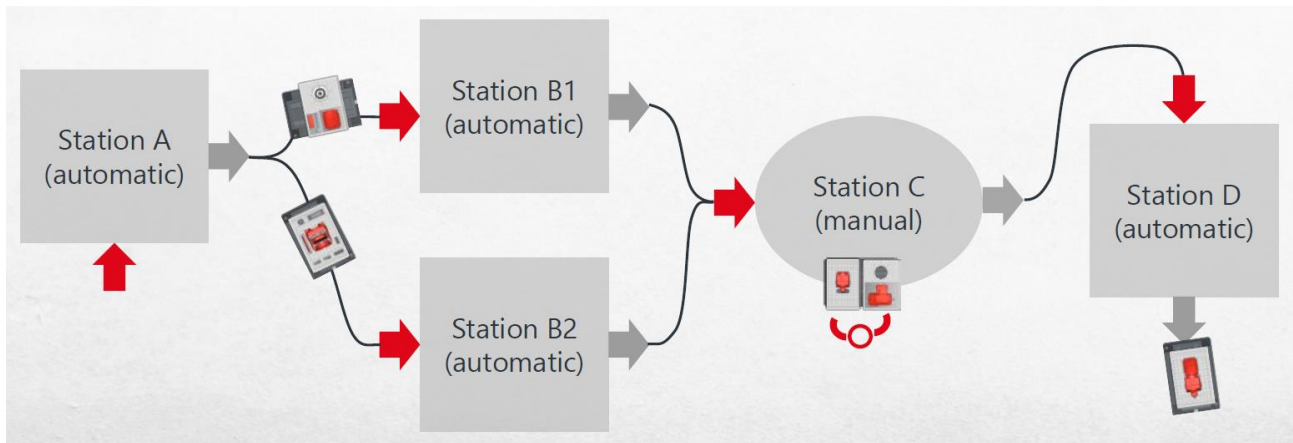


Reference Workflows

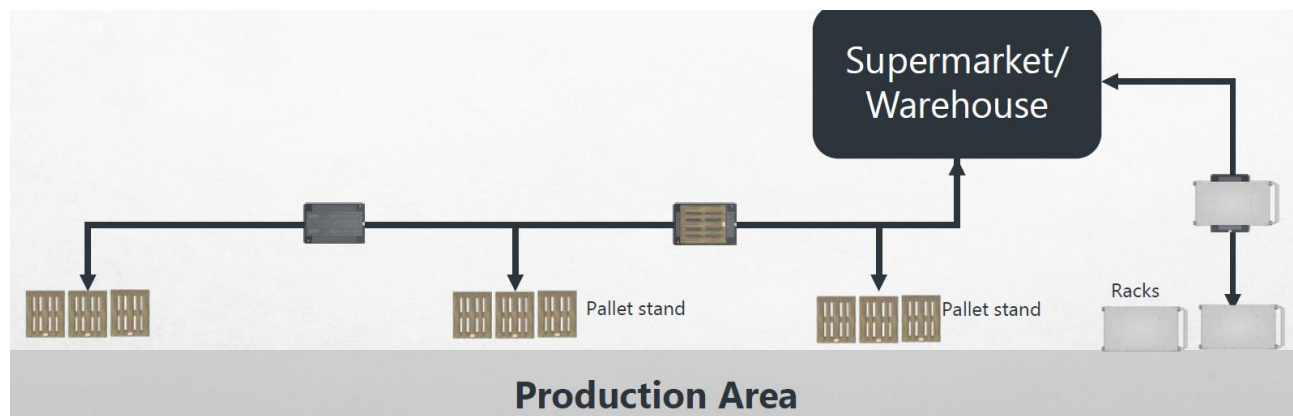
Logistics Distribution: Automated Material Transportation connects Receiving, Warehouse, End of Line, Palletizing, Packaging, and Shipping Areas



Process Integration: Automated WIP Transportation between Automatic and Manual Workstations



Material Supply: Automated Transportation of Materials to the Production Area



Load handling vehicles

Platform










Our standard vehicle integrates seamlessly with customer load-handling systems like conveyors, lifts, and custom fixtures.

It uses an integrated lithium battery with inductive charging for continuous operation and precise axis control via a dedicated inverter and controller.

The system supports standard 24V DC power and Safe I/Os as well as advanced 360V DC, EtherCAT, and FSoE for efficient, reliable, and safe operation.



Model MLA B1600-P










 Dimensions L = 1500 mm 60 in W = 1000 mm 40 in H = 365 mm 14.5 in	 Energy supply Inductive spot charging (maintenance free)	 Navigation Laser contour navigation via Lidar (SLAM)
 Drive concept Middle differential drive	 Energy storage LiFePO 4 Battery	 Weight 430 kg 950 lbs
 Speed 1.6 m/s ~5.0 ft/s	 Special interface Driven axis for customer specific load handling	 Payload 1600 kg 3525 lbs

Lift platform

This vehicle includes all the features of our platform model with the addition of an integrated lift capable of raising and lowering the platform for streamlined transportation of shelves, racks, bins, pallets, and other loads.



Model MLA B1250-LP

 Dimensions L = 1500 mm 60 in W = 1000 mm 40 in H = 400 mm 15.75 in	 Energy supply Inductive spot charging (maintenance free)	 Navigation Laser contour navigation via Lidar (SLAM)
 Drive concept Middle differential drive	 Energy storage LiFePO 4 Battery	 Weight 510 kg 1125 lbs
 Speed 1.5 m/s ~5.0 ft/s	 Stroke 150 mm ~6 in 15 mm/s ~0.6 in/s	 Payload 1250 kg 2750 lbs










Pallet transfer vehicles

Pallet transport with integrated lift module

This vehicle is built for pallet transport, featuring an integrated lift to collect pallets from various transfer stations. Its inductive charging during load exchanges ensures extended range and continuous operation.



Model MLA B1250-L





 Dimensions L = 1500 mm 60 in W = 1000 mm 40 in H = 420 mm 16.5 in	 Energy supply Inductive spot charging (maintenance free)	 Navigation Laser contour navigation via Lidar (SLAM)
 Drive concept Middle differential drive	 Energy storage LiFePO 4 Battery	 Weight 590 kg 1300 lbs
 Speed 1.6 m/s ~5.0 ft/s	 Stroke 150 mm ~6 in 15 mm/s ~0.6 in/s	 Payload 1250 kg 2750 lbs 450 mm 18 in transfer height

Pallet transfer with integrated conveyor module

This vehicle is ideally suited for the seamless transfer of pallets, boxes, containers, and other loads thanks to its robust design, inductive charging capabilities, and advanced navigational technology.



Model MLA B1250-C

 Dimensions L = 1500 mm 60 in W = 1000 mm 40 in H = 675 mm 26.5 in	 Energy supply Inductive spot charging (maintenance free)	 Navigation Laser contour navigation via Lidar (SLAM)
 Drive concept Middle differential drive	 Energy storage LiFePO 4 Battery	 Weight 650 kg 1425 lbs
 Speed 1.6 m/s ~5.0 ft/s	 Transfer Height 500 mm ~20 in	 Payload 1250 kg 2750 lbs

Large load vehicles










This versatile vehicle easily handles heavy, irregular loads. Its omni-directional drive ensures smooth movement in tight spaces, and the lift module allows precise vertical positioning.



Reference applications

Car body transport • Long material transport • Special load transport

Model MLA O3000-L

 Dimensions L = 3800 mm 150 in W = 1100 mm 45 in H = 450 mm 17.75 in	 Energy supply Inductive spot charging (maintenance-free)	 Navigation Laser contour navigation
 Drive concept Omnidirectional drive	 Energy storage LiFePO 4 Battery & MoviDPS SuperCaps	 Weight 1370 kg
 Speed 1 m/s ~3 ft/s	 Stroke 105 mm ~4 in	 Payload 3000 kg

Supporting technology and service



Contactless energy transfer

MOVITRANS® is our advanced energy transfer system, providing spot or continuous inductive charging for both moving and stationary vehicles. Its decentralized design reduces downtime and eliminates the need for additional vehicles, offering flexible ground installation and power transfer capabilities of up to 11 kW.



Software solutions

FleetManager software system, developed by SEW-EURODRIVE, manages traffic, routing, and load management of AGV vehicles. It uses MQTT for system communication and follows the VDA5050 standard for AGV communication.



Project execution

MAXOLUTION® offers complete support that includes system design and simulation to commissioning and training. Remote support is available and based in the USA.