OTTO MOTORS

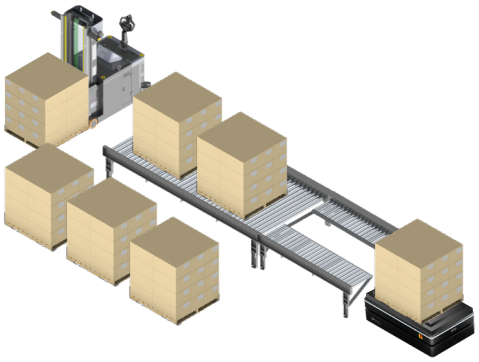
Automate Workflows in Your Facility

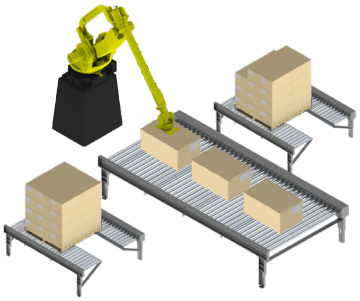
Built to deliver the highest throughput in its heavy class, OTTO 1200 is a compact AMR that moves more in tight spaces. Equipped with proprietary steerable field set technology, OTTO 1200 quickly maneuvers around people and turns, delivering best-in-class average speed without compromising on safety.

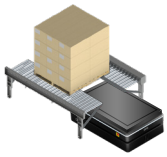
PALLETIZED FINISHED GOODS TO OUTBOUND

1. Palletized goods are placed on pick-up and drop-off stands (P&D)

2. OTTO 1200, equipped with a lift, is requested via workstation or PLC integration



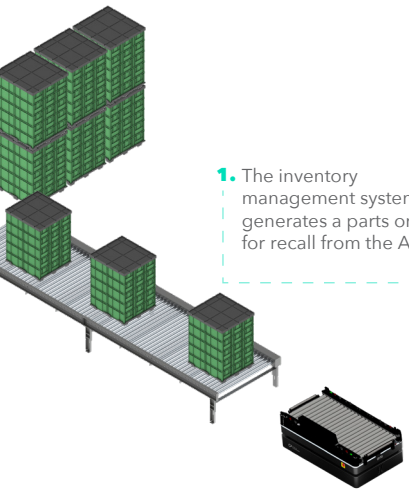




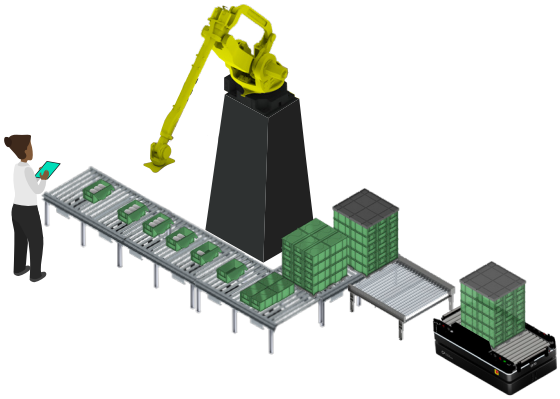
3. OTTO drives under the P&D stand to pick up the pallet

4. OTTO 1200 delivers the pallet to the designated staging area, where OTTO Lifter picks up the pallets tocreate outbound lanes

ASRS TO LINESIDE



1. The inventory management system generates a parts order for recall from the ASRS



2. OTTO 1200, equipped with a conveyor, drives to the ASRS and transfers the material

3. OTTO transports the material to the point of use on the assembly line

4. OTTO delivers the material to the lineside conveyor for use on the production line

REDUCE COSTS

OTTO reduces time wasted and variability with manual material handling by operating on a lean approach.

ADDRESS LABOR SHORTAGE

OTTO AMRs enable businesses to address labor shortages and eliminate FTE spend on low value and repetitive work.

ACHIEVE ENTERPRISE SCALE

Unlike other AMR providers, OTTO Motors' customers are able to operate at scale with 1 to 100 robots to optimize productivity.

OPTIMIZE PRODUCTION

OTTO enables flexibility in material handling and faster product cycles that can ramp up and down based on demand.

IMPROVE SAFETY

OTTO Motors AMRs are uncompromising when it comes to safety.

Technical Specifications

OTTO MOTORS

OTTO 1200

OTTO 1200 moves heavy payloads up to 1,200 kg (2,640 lb) in the tightest and most dynamic environments. Designed with a service-first approach, OTTO 1200 features rapid access drawers for simplified maintenance to achieve maximum uptime.

PERFORMANCE

Max Capacity	1200 kg (2640 lb) Includes Payload and Attachment, if any
Max. Speed	1.5 m/sec (3.4 mph)
Docking Accuracy Standard	±10mm (x,y,) ± 1° φ (yaw) Repeatable to 3σ
Max. Turning Speed	0.8 rad/sec (45°/sec)
Max. Docking Speed	0.3 m/sec (0.7 mph)

CHASSIS

Dimensions	1350x910x320 mm (53.1 x 35.8 x 12.6 in)
Mass	370 kg (815 lb)
Turning Radius	Turn in place
Suspension	Passive, Rocker
Ground Clearance	30 mm (1 3/16 in)
Floor Obstacle	4 mm (5/32 in)

ENERGY SYSTEM

Battery Capacity	21Ah
Max. Charge Rate	42A
Charge Time (10% to 90%)	30 min
Battery Voltage	48V
Battery Life	6000 full charge cycles
Battery Charging Options	Autonomous Opportunity Charging (Default) Manual Charging

SAFETY SYSTEM

Adaptive Fieldsets	Intelligent PL-d rated switching fieldsets (patent-pending)
Standards Compliance	Designed in accordance with present standards. Passed in accordance with CE.
Manual Control	Pendant-based manual control. Guided autonomous control available via OTTO software interface.

ATTACHMENT INTERFACE

Power Interface	24 VDC, 1A, regulated, unswitched 48 VDC nominal, 3x16A, unregulated
Signal Interface	Ethernet, USB CAN Bus, GPIO Safety I/O
Safety Interface	Dual-channel E-Stop breakout, 2 safety-rated GPIO

CONTROL SYSTEM

Sensors	2x Forward facing 3D Perception Cameras 2x LiDAR 6-axis IMU
Computer	Fanless Embedded Computer
Communication	802.11 a/b/g/n/ac, 2.4 Ghz & 5 Ghz 2x Long-range Omnidirectional Antennae

ACCESSORIES (Sold Separately)

Charging	Autonomous Supercharger (42A) Manual Trickle Charger

ENVIRONMENTAL

IP Classification	Designed to IP54
Temperature	5 to 40° C
Humidity	10-95% non-condensing

For more information visit **www.ottomotors.com**
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Romias is an OTTO Certified Integrator
romias.nl | +31 547 388 599