DOUBLE PRODUCTIVITY WITH THE ROBOTIC UNLOADER.

REASSIGN LABOR FROM
THE RECEIVING DOCK

Few warehouse jobs are more arduous, repetitive and subject to high turnover than manually unloading freight on the receiving dock. Hot during summer months and bitterly cold during winter, maintaining consistent staffing — much less consistent performance — stretches operations thin.

That's why dock unloading is a prime task for automation, but only if the solution delivers a combination of rate and package care comparable to manual processes. The robotic unloader from Honeywell Robotics is a fully automated solution with the performance required for parcel sortation, retail distribution and e-commerce

operations. Usable as a stand-alone automation or as part of a fully integrated system of robotic solutions, it has the flexibility to unload a wide variety of trucks, trailers or shipping containers — no modifications required.
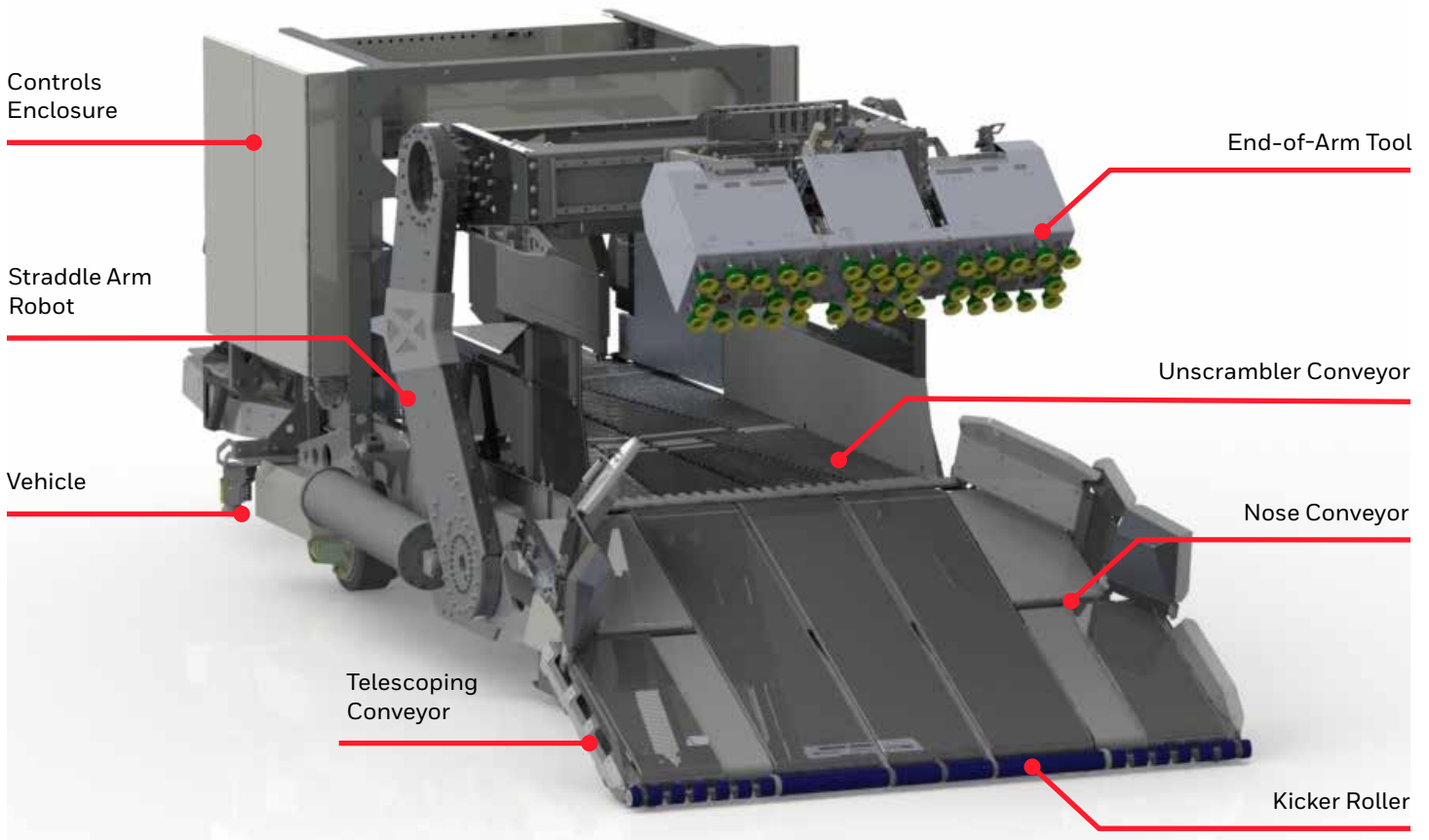
WORK IN THE WAREHOUSE

Five injuries per **100** full-time warehouse workers — over 50% higher than overall average

Turnover rate for warehouse workers is
36%

Source: U.S Bureau of Labor Statistics

Controls Enclosure

Straddle Arm Robot

Vehicle

Telescoping Conveyor

End-of-Arm Tool

Unscrambler Conveyor

Nose Conveyor

Kicker Roller

MAKE UNLOADING EFFICIENT AND AUTOMATED

Honeywell Robotics uses advanced vision-guided robotic technology, machine learning-based decision making and sophisticated AI — similar to that of driverless vehicles — combined with integrated controls and conveyors to automate the freight unloading process.

- Fully autonomous operation doesn't require an operator to remain on standby or direct the machine

- Advanced machine learning allows the robot to work faster, handle products with greater care, and increase its own performance over time

- Perception and decision-making improvements can be learned from or shared with other robots

- Multiply individual labor productivity with operators supervising many machines for consistently high throughput throughout entire shifts

- Maximizes equipment utilization by traversing between dock doors

- Improves efficiency of other DC processes by discharging products in a semi-singulated flow

- Minimizes jams with a robust operating algorithm, integrated unscrambler and dynamic side guides

- Automated exception detection alerts operators to unexpected pallets, overweight items and other scenarios outside the machine's handling capability

- Prevents problems before they occur — even among multiple sites — with sophisticated reporting, diagnostics and alerts

- No advanced engineering skillsets required for supervision, operation and troubleshooting

- Optional built-in connectivity for rapid remote support by Honeywell Robotics service personnel

HANDLE VARIETY WITH PURPOSE-BUILT FLEXIBILITY

The robotic unloader delivers the flexibility to accommodate products in all shapes and sizes to meet consumer demands and the adjustability to strike the right balance between speed and package care.

- Capable of handling individual cases up to 75 pounds and multiple cases simultaneously up to 350 pounds

- Accommodates cases with dimensions as small as a box of tissues and as large as a washing machine

FAST, EASY INTEGRATION WITH OTHER SYSTEMS

Honeywell Robotics engineered the robotic unloader to increase throughput volume and reduce unloading times without disrupting existing systems and equipment. No modifications are required to shipping containers, and the unloader provides easy integration with auxiliary conveyor systems. You'll reap the benefits of the unloader without incurring additional costs or creating bottlenecks.

The Brains of the Operation

SEE Better · HURC · THINK Smarter · ACT Faster

Since 2019, all Honeywell Robotics unloaders have operated on a universal control platform, the Honeywell Universal Robotics Controller (HURC). Developed in partnership with Carnegie Mellon University, HURC enables robots to see better, think smarter, and act faster.

Significant processing power, state-of-the-art machine learning and AI enable HURC robots to adapt to changing conditions quickly and improve their own performance on the job. DCs benefit from:

- **Superior performance** with a controller designed specifically for distribution centers

- **Reduced labor constraints** made possible by providing the foundation for an integrated automation ecosystem

- **Increased speed to market** enabled by advanced simulation and training capabilities

- **Ongoing performance enhancements** via machine learning, plus a connected platform that allows training models to be shared between robots and sites

- **Fewer operator interventions**, thanks to proactive diagnostics and alerts

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell
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