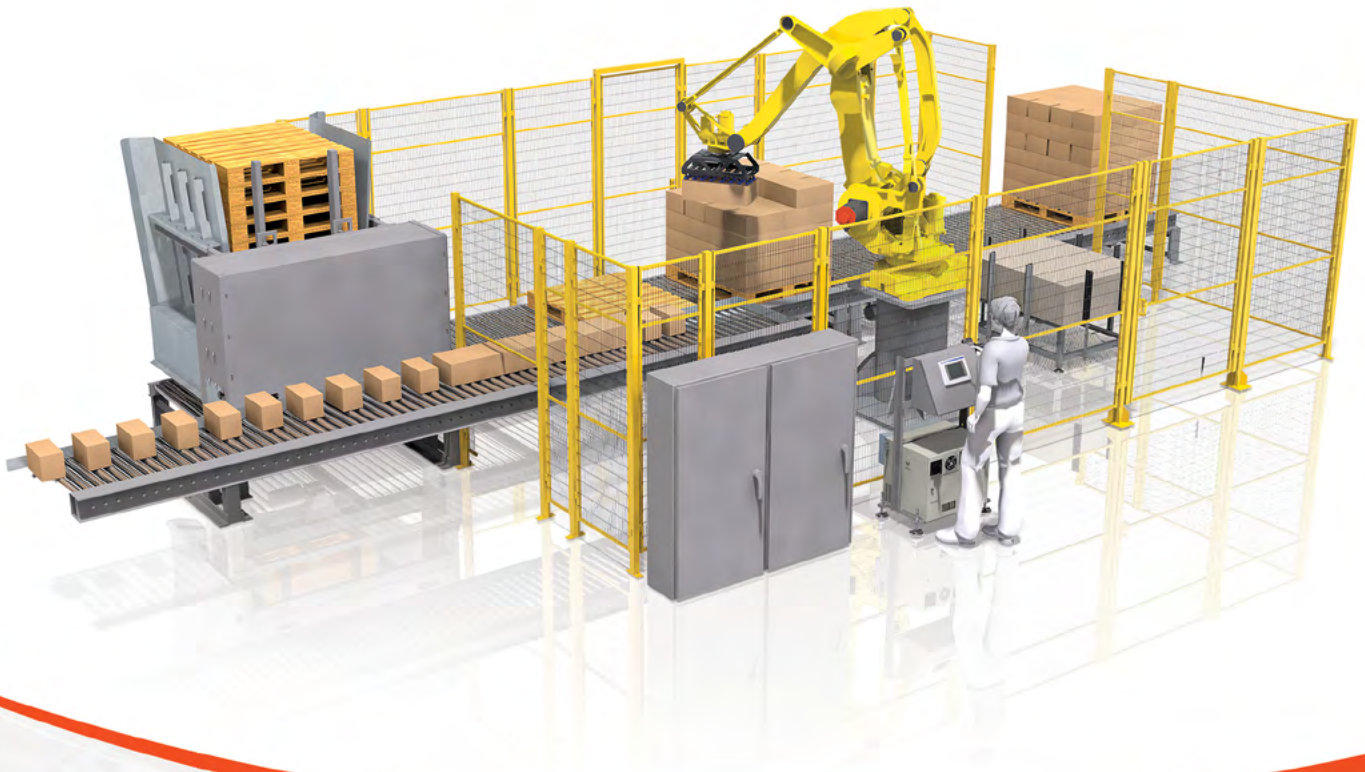




ROBOTIC PALLETIZING SYSTEMS



Complete your end-of-line packaging with confidence.

As your secondary packaging partner, Douglas' capabilities in end-of-line palletizing provides even more value. With deep expertise in system engineering, a continuous drive for meaningful innovation and a customer-driven culture, Douglas is ready to help you take the next step towards seamless integration with Stratum™ robotic palletizing systems.

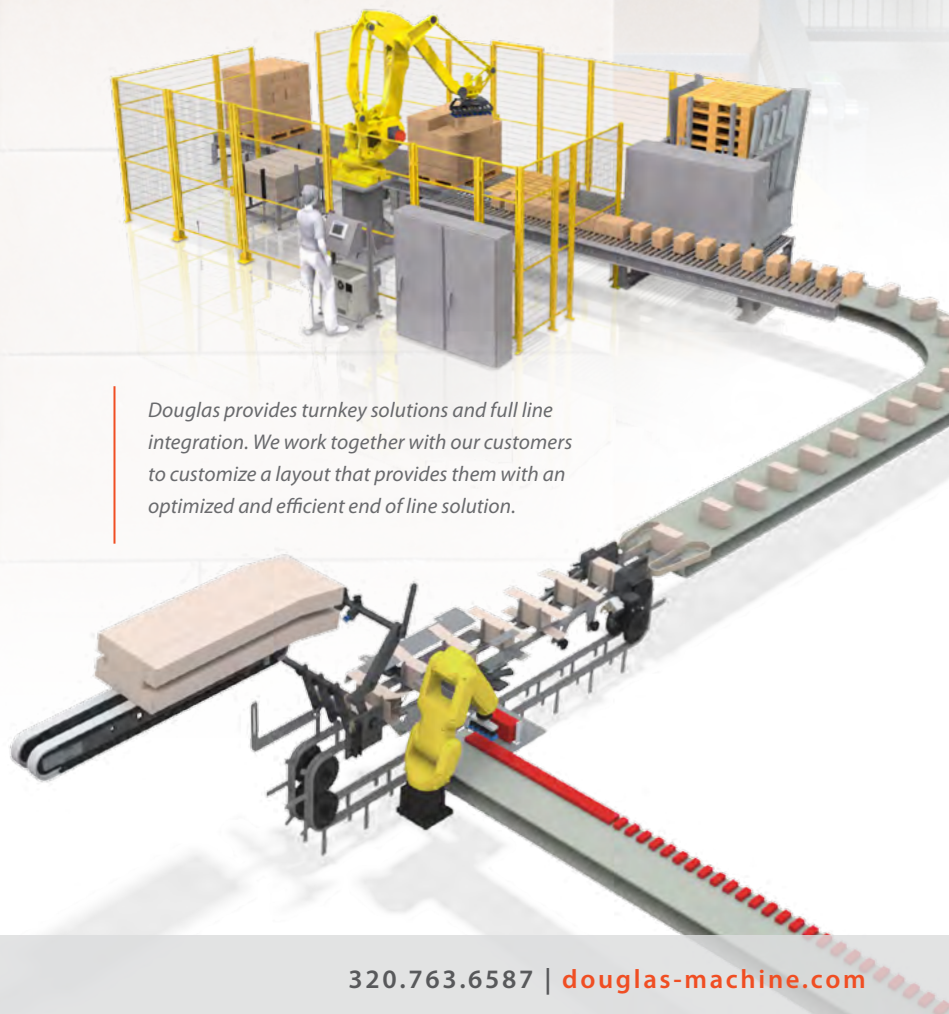


Experience + Innovation = Optimization

Stratum™ Robotic Palletizing Systems

Optimize system designs and take the next step towards seamless integration with the reliable, robust Stratum Palletizer. Easily integrated to Douglas packaging and cartoning equipment, Stratum dispenses and conveys pallets, places slip and tier sheets, stages cases and utilizes robotics to palletize cases.

- Pick and place of single or multiple cases, including an entire row
- Capable of single-in/single-out or multi-in/multi-out configurations
- Multiple infeed/discharge configurations available
- Optional integration of third party stretch wrappers
- Allen-Bradley HMI interface
- Multiple robot models available based on speed, payload and reach
- Design configurations optimize robot utilization, case handling and pallet handling
- Slip sheet and tier sheet capability
- Guarding fence with integrated light curtains and safety switches
- Pallet delivery options including conveyance and dispensers



Douglas provides turnkey solutions and full line integration. We work together with our customers to customize a layout that provides them with an optimized and efficient end of line solution.

Creative Solutions, Advanced Automation

End of arm tooling options

End of arm tooling (EOAT) is designed to suit both the incoming product and pick requirements. Dependent on the application and robot utilization, EOAT functionality may include:

- Pallet picking and placement into the pallet build station
- Pick and placement of slip sheets, tier sheets or top caps

Tool options:

- Vacuum
- Clamp
- Fork

Pallet Dispenser

Automatic pallet dispensers provide pallet accumulation and delivery, offering convenience, space saving and supply to one or multiple lines.

- Dispenser holds 12-15 pallets
- Magazine can be reloaded while the machine is running
- Up to 90 pallets per hour are dispensed
- Automated system eliminates the need for the operator to manually intervene with each pallet
- Great flexibility and increased functionality with independent HMI and start/stop capabilities

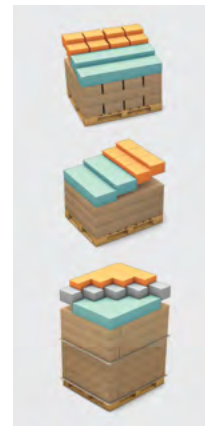


Specifications

PRODUCT SPEED	Multi-picking up to 40 cases per minute (per robot) Single pick up to 10 cases per minute (per robot)
PRODUCT SIZE RANGE	Soft Limit Minimum: 4" x 3" x 6" Soft Limit Maximum: 20" x 24" x 24" * DOT x Vertical x Across Machine
PALLET PATTERNS	Solutions including column stacking, interlocking layers, Fanuc Roboguide pattern development, slip and tier sheets

Specification limits may not be available in all combinations and are subject to change without notice. For custom specifications and information, contact a Regional Sales Manager today at: [320.763.6587](tel:320.763.6587) or info@douglas-machine.com.

Typical Pallet Patterns



Customer Driven After Sale Support



Douglas is proud to provide world class service for all our customers' needs.

Remote Service Technicians are located throughout the United States to offer local support as quickly as possible. We offer exceptional programs designed to keep your operation on the move and improve your bottom line. Machine inspection, audit, analysis, training and a solid warranty just to name a few. Our team is dedicated to assisting you throughout the life of your equipment.

When you choose Douglas, you're getting more than a quality product, you're gaining a complete **Customer Driven** experience. In every aspect of your relationship with us, our friendly and skilled employee owners are 100% committed to provide you with valuable and effective collaboration, innovative solutions, responsive support and more.

more. It's not just what we do, it's who we are.

To discover how **Customer Driven** means **more** to you, contact Douglas Machine at [320.763.6587](tel:320.763.6587) or info@douglas-machine.com to discuss your packaging needs today.

Visit douglas-machine.com for details about our company, our products/solutions and our service & support.



EMPLOYEE OWNED, CUSTOMER DRIVEN.