EDGE Automation

HanDoor™

Door and Panel Handling System



Keep Your Line Running. Eliminate the Manual Handling. Increase Productivity.

HanDoor™ is a special-purpose robotic handling system that singulates, picks, and places doors, panels, sheets, and pre-hung units to **keep production lines running without interruption.**

What it Does

HanDoor™, a special-purpose automation system, for the singulation of stacks of doors, boards, slabs, sheets, prehung doors, jambs and glass panels to continuously feed the next process in medium to large production facilities.

Best For

- High-volume door and panel production facilities.
- Facilities in kitchen and bath, residential, commercial, architectural, or hospitality manufacturing sector.
- Plants handling heavy or oversized materials — doors, slabs, glass panels, pre-hung units up to 700 kg.
- Teams looking to meet NIOSH lifting standards without sacrificing output.
- Lines that need to integrate robotic automation with existing CNC centres and downstream equipment.

Advanced Automation Solutions for Efficient Manufacturing



CNC Handing System

- Loads the CNC while referencing against pins to establish a repeatable datum – precision cutting, routing & machining.
- Ensuring consistent positioning, delivering high precision and repeatability.



Door Buffer and Staging Systems

- Stages doors between faster upstream and slower downstream processes, eliminating unbalanced cycle times.
- It automatically accumulates and releases doors as needed, decoupling the processes to prevent bottlenecks and idle time.



Finishing Line Handling System

- Automates door loading and unloading for sanding and coating with precision and repeatability.
- Improves throughput while reducing labour and material waste.

Powering Productivity Through Innovation

HanDoor™

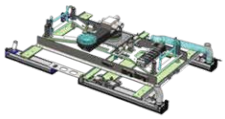
Robotic Cell — End-of-Arm Tool (EOAT)

This intelligent, vision-guided robotic cell accurately recognizes, picks, and places panels from a stack. It can handle payloads ranging from 80 kg to 700 kg and is built for end-of-line and distribution tasks, ensuring consistent quality and efficiency at every station.

Six precision-engineered EOAT effectors, each specially designed for handling panels and doors.



Fixed Bar



Variable Bar



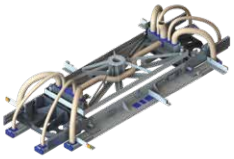
Servo Auto Size



Double-Sided Vacuum Cup



Parallel Grip



Multi Bar



Robot Transfer Unit (RTU)

- This unit extends the robot's reach along a linear track measuring 3 to 30 meters, with a repeatability of ±0.25 mm. It utilizes a modular steel rail and a lubricated rack-and-pinion drive.
- The RTU allows repositioning of the robot along the line, while the EOAT effectively combines extended range with pinpoint accuracy.
- The automatic lubrication system extends the life of the rack and pinion.

HanDoor™ accelerates throughput, handles multiple suite flow configurations and can interact with any CNC centre (style and brand). Every cycle delivers measurable gains, so the return on investment is faster.

Why Edge Automation?

vertical integration + controls/robotics + partnership + efficiency

Kitchen & Bath | Hospitality | Residential | Commercial | Architectural

EDGE Automation

Since 2002, Edge Automation has partnered with manufacturers who demand reliability and precision. We deliver custom-designed automation solutions.

Talk to an automation engineer

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