



Application - Robotic Board Handling

Polyiso | Panels | Boards | Plastic sheets | Glass | Other Flat Product

Level 4 Certified Servicing Integrator

We provide innovative robotic solutions from concept to install and 24/7 service and support for complete customer satisfaction.



Material handling applications, like stacking flat products, can greatly benefit from the integration of robots into the process. The main drivers for adding robotics are a need for a safe work environment, cost reduction, consistent manufacturing results, and increased quality through minimizing product damage.

A well designed robotic work cell can provide the flexibility necessary to handle and process a wider range of products and is upgradeable for future needs. Achieving Level 4 Certified Servicing Integrator status from FANUC, provides MCRI with the widest range of four and six axis robots in the world. Together FANUC and MCRI ensure customers an unsurpassed level of reliability and support.



"The Motion Controls Robotics' Board Handling System allowed us to increase production by 60 percent due to a faster run rate. Overall, we have seen an average of a 20% to 30% increase in production speeds."

~ Plant Manager
Building Materials Industry

Applications

Polyiso – High speed process with the ability for turning boards for stacking needs.

Panels – Smaller boards can be picked and stacked quickly then moved to strapping or other areas.

Boards – Stacking of products such as drywall and plywood using special end of arm tooling.

Plastic & Glass Sheets – Stacking includes adding slipsheets between or wrapping product before stacking flat or in specialized containers.

Robotic Board Handling

Board Handling Robots

FANUC robots have industry leading software and vision options available to increase your system's flexibility and fine tune every process. We can design your robot cell with future needs in mind, so your robots are reusable and re-deployable if there are product changes. Six axis robots are typically selected for roll handling applications.



FANUC Robots	payload	reach
M410 series	up to 700 KG	up to 3143 mm
R2000 series	up to 270 KG	up to 3540 mm
R1000 series	up to 130 KG	2230 mm
M710 series	up to 70 KG	up to 3123 mm

* Chart includes commonly used robots. Contact MCRI for other FANUC robots available for board handling needs - sales@motioncontrolsrobotics.com



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Talk about Fat Stacks



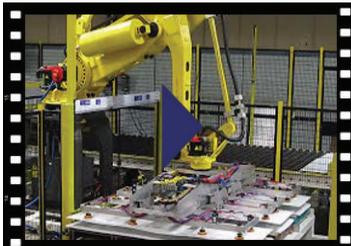
Watch Videos



Wood Plank Handling



Flat Product Examples



Extruded Sheet Handling



Polyiso Board Handling

Motion Controls Robotics has designed 17 Polyiso board handling robot cells - the oldest running 24/7 since 2004. Based on rate for these systems, we have stacked enough boards to make *750 stacks of boards as tall as Mt. Everest*. MCRI can bring this expertise to you, keeping your production numbers competitive.

We offer:

1. an increased per minute rate capability of stacking.
2. an improved End of Arm Tool for picking Polyiso boards.
3. the ability to stack tapered boards by rotating boards 180 degrees.
4. handling of different thicknesses and lengths (4 – 16 feet long).
5. previous systems have shown companies can reduce labor needs in stacking cells by 50-66% - keeping production rates high and consistent.



Benefits of Robotic Board Handling

Production Cost & Risk Reduction

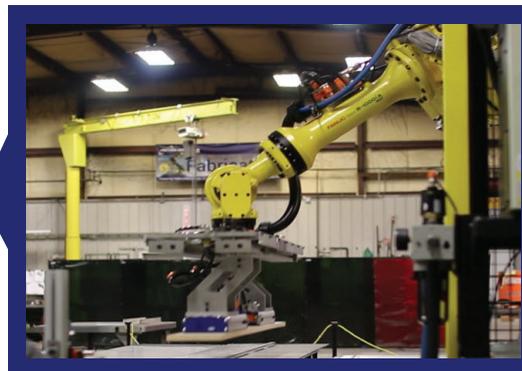
- Predictable performance
- Eliminates repetitive motion injuries
- Minimizes seasonal labor needs
- Improves overall product yield
- Allows optimization of production rates

Reliable & Flexible

- Handles wide variety of product sizes
- On-the-fly process adjustments
- Adjusts automatically for normal process variations
- Low maintenance state-of-the-art components
- Simple straightforward end-of-arm tooling

Easy of Operation

- Automatically match robot speeds to production rate (to increase longevity of equipment)
- Automatically rotate and invert product, as well as orient product taper
- Control of upstream and downstream operations



Robotic Board Handling

Keeping Manufacturers Competitive with Quality Robotic Solutions