IntelliBreak





MATERIAL TRANSFER TRANSFER AMBROSE

IntelliBreak is a fully automated robotic bag break station designed to eliminate the risks, inefficiencies, and mess of manual bag handling.

Engineered for high-throughput environments, IntelliBreak combines advanced robotics, AI vision, and customizable components to deliver unmatched performance in material processing.

Safety First

Eliminates manual lifting and cutting of 50-lb bags—dramatically reducing workplace injuries.

Adaptable & Compact

It fits into tight spaces and integrates seamlessly into existing facilities, requiring no major retrofits.

Consistent Performance

Operates continuously with precision, maintaining productivity across thousands of bags.

Optimize Workforce

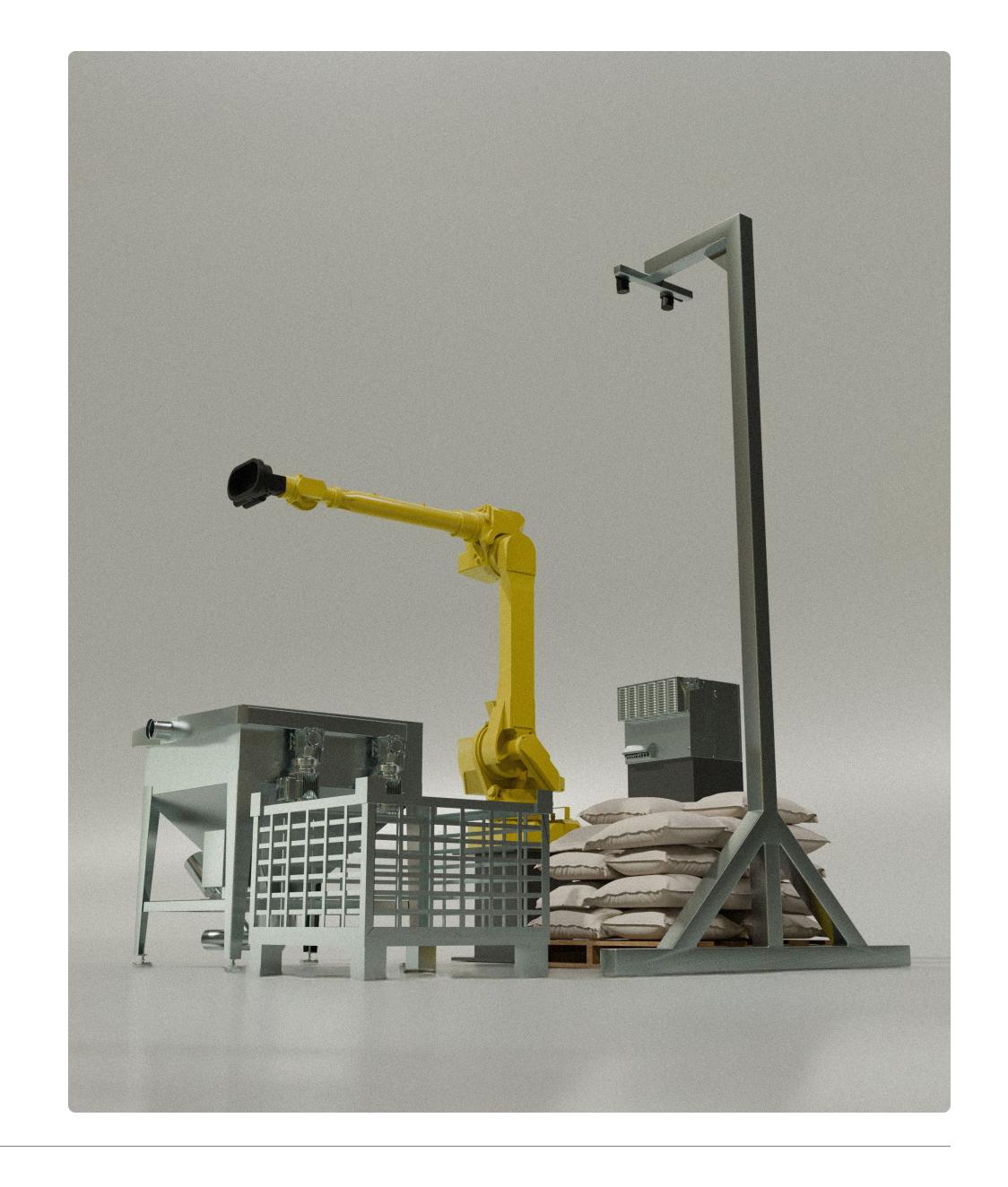
Frees up skilled employees for higher-value tasks, such as maintenance and quality control.

Boosted Efficiency

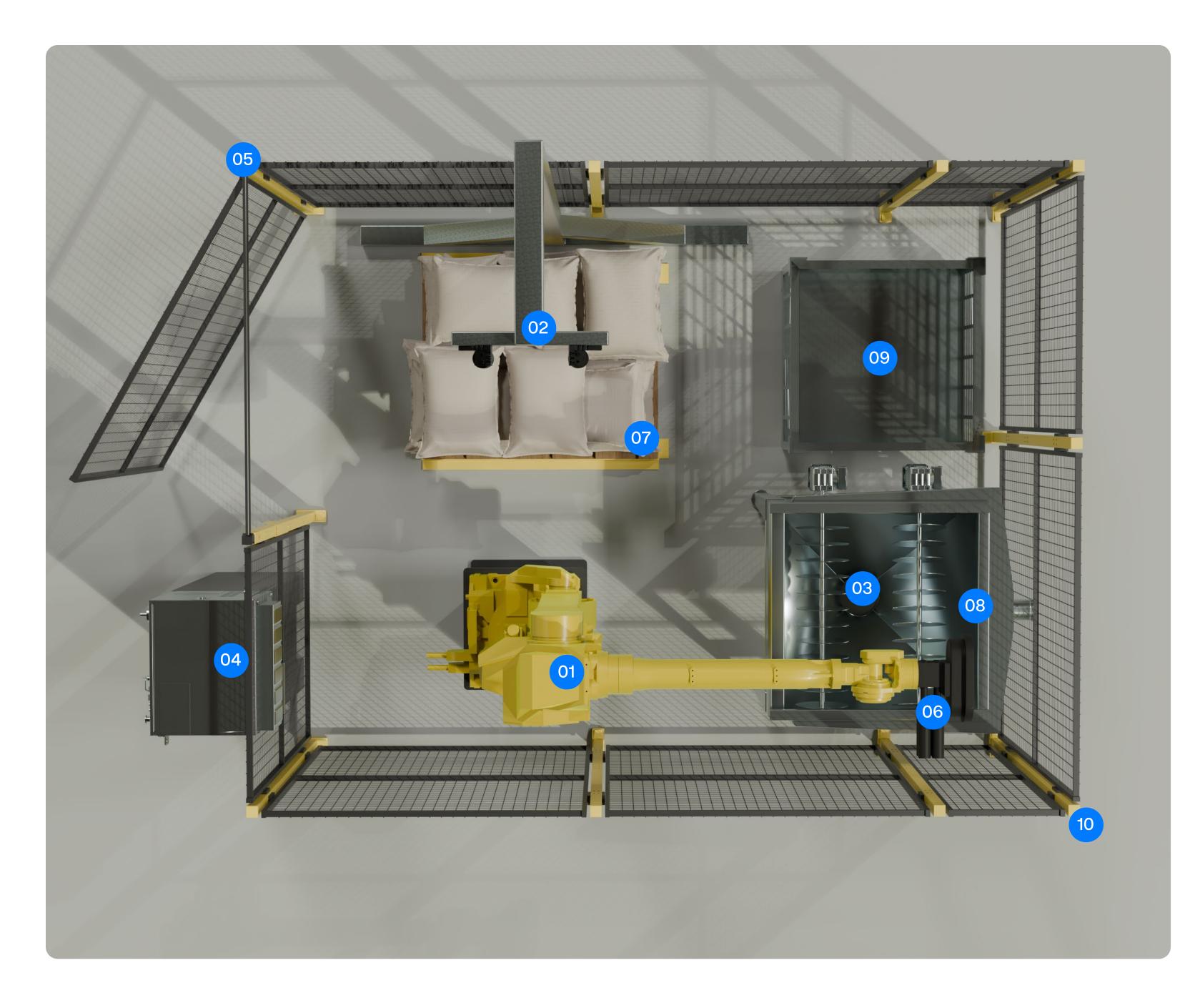
Accelerates material flow, reduces bottlenecks, and minimizes spillage for cleaner, productive workspaces.

Fast ROI

Lower labor costs, fewer injuries, and higher throughput mean IntelliBreak pays for itself quickly.







Solution Overview

01 | Robot

The Fanuc M-710/50M series 6-axis robot features a high payload capacity and a compact design. It is optimized for efficient bag handling and material discharge, ensuring high throughput in demanding environments.

02 | Vision System

Powered by AI learning, the Vision System intelligently guides the robot to each new pick position on the pallet, ensuring accurate, efficient handling every time.

03 | MTS Bag Breaking Station

The bag-breaking station is customized to fit the specific product and bag type you're working with. We also offer pneumatic or mechanical conveyance options to seamlessly transfer materials, with screening devices available to reduce contamination risks.

04 | Controller

This system, equipped with the R-30iB controller, is Ethernet-compatible for seamless integration and communication with other processes. An advanced DCS package safeguards the robot's precise operating zone.

05 | Safety Fencing

Safety Fencing creates a compact yet secure cell for optimal safety. Options like light curtains and area scanners can be used to tailor the safety measures to your specific facility needs.

06 | End of Arm Tool (EOAT)

Each application is paired with the ideal EOAT, which includes external vacuum generation and mechanical actuation options. This enables secure handling across various bag types, weights, and materials.

07 | Pick Position

This system can accommodate multiple pallet positions and easily adapts to pallets that aren't uniformly stacked, making loading as hassle-free as possible.

08 | Dust Collection

Dust collection is pulled from the outside perimeter of the bag break station to minimize housekeeping. A self-contained option is also available to reduce product loss and minimize cleanup.

09 | Bag Discard Location

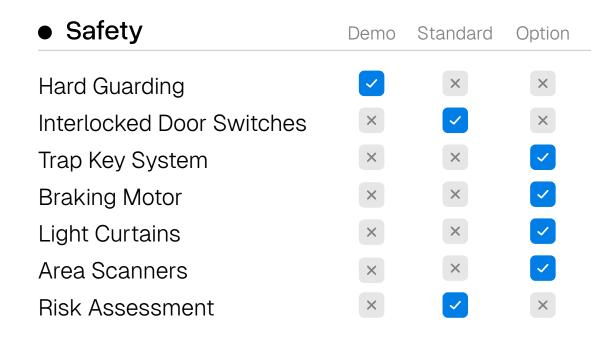
Once emptied, bags are directed to a discard location, with options for in-cell disposal, external conveyance, or compaction integration to streamline waste handling.

10 | Footprint

The standard cell footprint is approximately 9'x12', designed for seamless integration into space-constrained facilities without sacrificing performance.

Configuration Overview

Configurable options for safety, dust control, material handling, and robot type let you tailor the cell to your operation—boosting efficiency, safety, and performance.

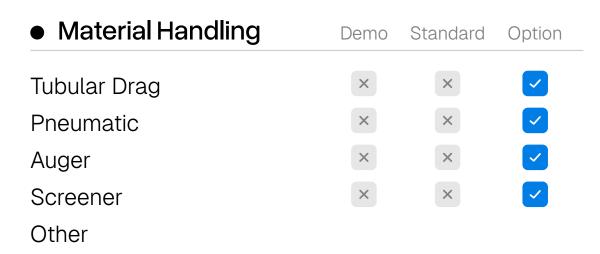


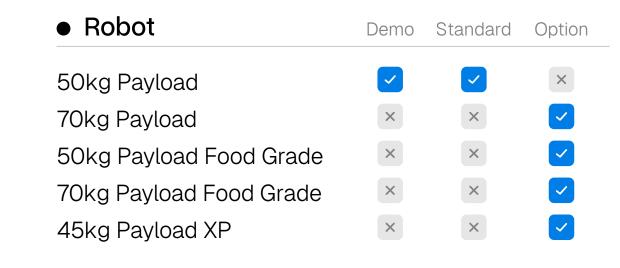
Process	Demo	Standard	Option
Bag Disposal In Bin	✓	✓	×
Bag Compactor (Bail)	×	×	✓
Bag Compactor (Screw)	×	×	✓
Bag Shredder	×	×	✓
Bar Code Scanner	×	×	✓
3D Vision System	✓	✓	×

Dust Control	Demo	Standard	Option
None	<u> </u>	×	×
Hooded With Port	×	~	×
Hooded Pulsed Filter	×	×	✓
Dedicated Collector	×	×	✓

Pallet Locations	Demo	Standard	Option
1	✓	<u> </u>	×
2	×	×	/
3	×	×	/
More than 3	×	×	/

 Pallet Infeed/Outfeed 	Demo	Standard	Option
Manual	✓	<u> </u>	×
CDLR	×	×	✓
Pallet Stacker	×	×	✓
Slip Sheet Stacker	×	×	✓





OPERATE SAFER

 Classification 	Demo	Standard	Option
Non-Rated	✓	✓	×
Class 1, Div 1	×	×	✓
Class 1, Div 2	×	×	✓
Class 2, Div 1	×	×	✓
Class 2, Div 2	×	×	✓

AUTOMATE SMARTER

PERFORM BETTER

→ AMBROSE