



Building Materials

Automated Guided Vehicles (AGVs)

Built to withstand the harshest indoor environments



Rugged performance, improved efficiency

JBT's Building Material AGVs simplify your operations while increasing your productivity.

The AGVs are built to withstand even the harshest indoor environments and are specifically designed to handle various board types that make transporting materials more effortless.

The vehicle's flat, tapered forks handle unpalletized loads, preventing individual boards from slipping. With a lifting height capacity of about 14 feet, the board transport AGV can stack loads and place them on the floor.

The vehicles tolerate dust, interface with other automated equipment, and navigate well in deep lane storage. JBT's 360° obstacle detection prevents collisions while keeping your operation going. This allows you to stay focused on keeping up with demand and improving efficiency to support your future growth.



Built to move all types of building materials such as:

- Gypsum
- Plasterboard
- Drywall
- Plywood
- Insulation
- Roofing

Applications

- End of line / Stacker
- Warehouse to Staging
- Storage & Retrieval
- Trailer Loading / Unloading

Loads

- 4x8x40
- 4x8x36

Dunnage

- Size of dunnage (2.5" x 2.5")
- Baton-dunnage (piece that separates the bundles)

AGV Product Portfolio

Ideal for handling pallets, racks, and rolls, our counterbalance automatic guided vehicles (AGVs) excel in floor-to-floor transfers. However, they are not limited to floor operations and can interface with plant equipment, like racks, conveyors, and AS/RS.

Our counterbalance vehicles also provide excellent versatility. The lift mast, mounted at the very end of the vehicle, keeps the AGV clear of loads and minimizes vehicle width. This allows the AGV to handle multiple load types and multiple fork positions without complications.

CB1500	CB2500	CB4500
<ul style="list-style-type: none"> • Standard lift weight up to 1,500kg / 3,300lbs • Standard height up to 6m / 236" • Standard lift speed up to 4"/sec • Standard travel speeds up to 1.8mps / 350fpm* 	<ul style="list-style-type: none"> • Standard lift weight up to 2,500kg / 5,500lbs • Standard height up to 6m / 236" • Standard lift speed up to 4"/sec • Standard travel speeds up to 1.6mps / 315fpm* 	<ul style="list-style-type: none"> • Standard lift weight up to 4,500kg / 10,000lbs • Standard height up to 4m / 14ft • Standard lift speed up to 4"/sec • Standard travel speed up to 2.0mps / 394fpm*
<p><i>* The speeds are dependent on weight of load and travel path conditions</i></p>		

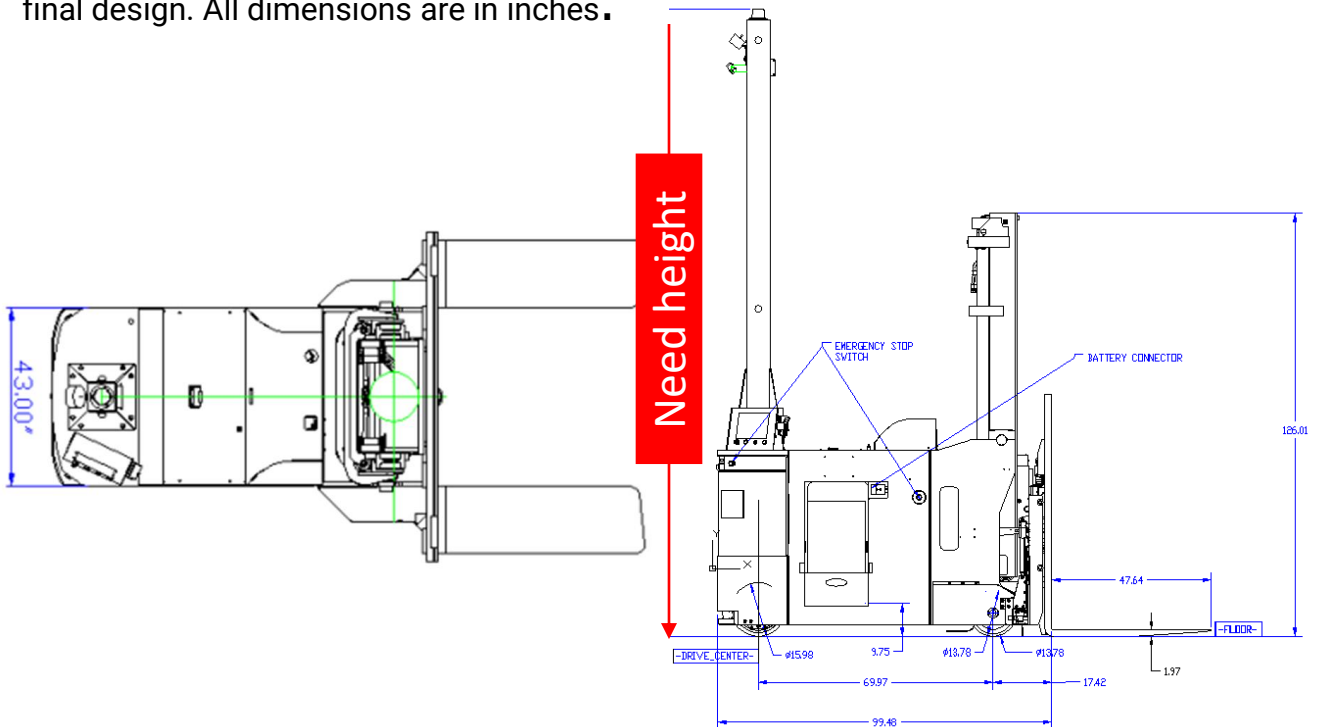


AGV Specification Sheet

Facility Operating Temperature:	+35 0F to +110 0F (+2 0C to +44 0C)
Stopping Accuracy:	± 0.38 Inch (±10mm) / ±0.5 degrees (at center-point between rear wheels)
Travel:	Bi-directional
Brake:	Electromagnetic – Spring Applied/Electric Release
Operating Voltage:	48VDC
Paint:	Standard JBT color scheme (white/gray/blue)
Bumpers:	One (1) front programmable laser scanner Two (2) side/rear programmable laser scanners
Lift Height:	~225 inches (to top of forks)
Fork Positioner:	Min ~4" inside-to-inside and max ~75" outside-to-outside
Forks:	~48" L x ~16" W (Final Dimension TBD)

Vehicle Layout Drawings

The drawings below are shown for reference only and dimensions may vary slightly on the final design. All dimensions are in inches.



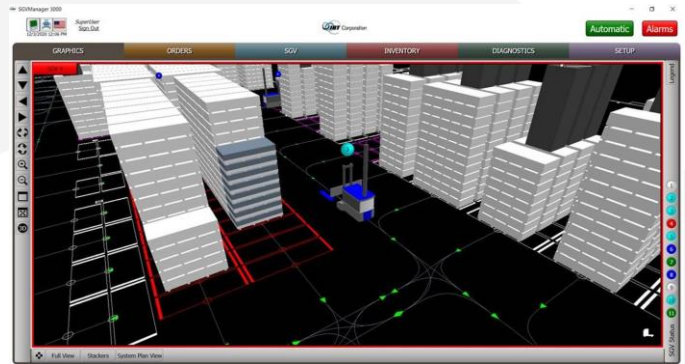
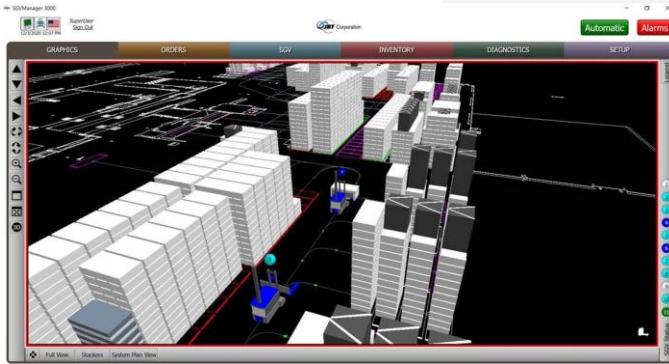
AGV Features



JBT SGV Manager

Controls and monitors the guided vehicle system.

Manages movement requests and coordinates all communication to **provide integrated, on-time material delivery.**



Navigation Types

Primary: Natural Feature Navigation

Dynamic and adaptable, with minimal infrastructure that requires less setup and installation time. An agile navigation system that allows you to change paths easily without changing infrastructure.

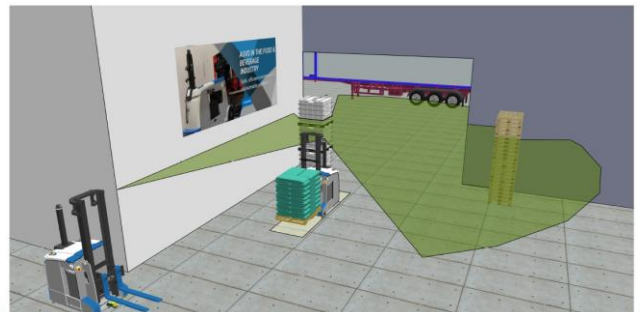
Secondary: Dunnage Following Navigation

Applies to Building Material AGVs. The sensor profiles the floor dunnage for valid profiles.

This type of navigation reduces the need for tall tower navigation and improves the system throughput and accuracy. Therefore, JBT AGVs fit into your building without significant changes to the infrastructure.

Secondary: Laser Triangulation Navigation

Rotating 2d laser that senses pre-surveyed reflective markers. Triangulation algorithm uses this feedback to determine the exact vehicle position and heading.



** Multiple navigation types may be implemented on each system dependent on customer's requirements*

JBT Capabilities



Let us help you design your greenfield site for automation

Benefits of early involvement

- Optimizing design using AGVs can increase storage space
- Minimize vehicle count
- Improves ROI



JBT will phase in the implementation of the AGV system as per our customer's requirements at their existing site(s).

AGV System Benefits



Reduce labor, product and building damage and repetitive tasks



Achieve repeatable quality and consistent product handling



Improve safety



Minimize human error, eliminating the need for cycle counting



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