



## Counterbalance 4500 (AGV)



### Flexible transport, maneuverable power

Our counterbalance AGVs move your materials and transform your business.

## Vehicle Features

- Handles gypsum & other building materials
- High floor clearance handles environmental challenges
- Interfaces with other automated and manual equipment
- Large tires, cushions loads throughout the facility
- 360° obstacle detection for improved safety
- Flat, tapered forks prevent loads from shifting

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 without complications.

## Vehicle Safety Features

Safety Devices on the Automated Guided Vehicle Include:

### Blue Safety Light

This light shows the path the vehicle will take to inform personnel in the area.

### Tower TIM Sensor

This Sick Tim361 sensor detects obstacles in the path of the vehicle that are above the area detected by the lower S300 Bumpers.

### Warning Lights

There are four warning lights:  
Flash **blue** during automatic vehicle movement.  
Flash **yellow** for turn signals.  
Flash **red** for alarms.

### Emergency Stops (4)

There are four emergency stop push buttons on the vehicle. These buttons each have a red mushroom head.

### Safety Reset Button

This button is used to reset the safety system after an E-Stop button is pressed, and at vehicle power up.

### Audible Alarm

The alarm sounds when:  
Vehicle is in Automatic, at rest,  
- prior to vehicle movement  
- moving forward or reverse  
- rotating

### Front Bumper

Sick Type S3000 that allow for multiple stop and slow fields based on vehicle speed and area of operation.

## Vehicle Safety Features

Safety devices (cont'd)

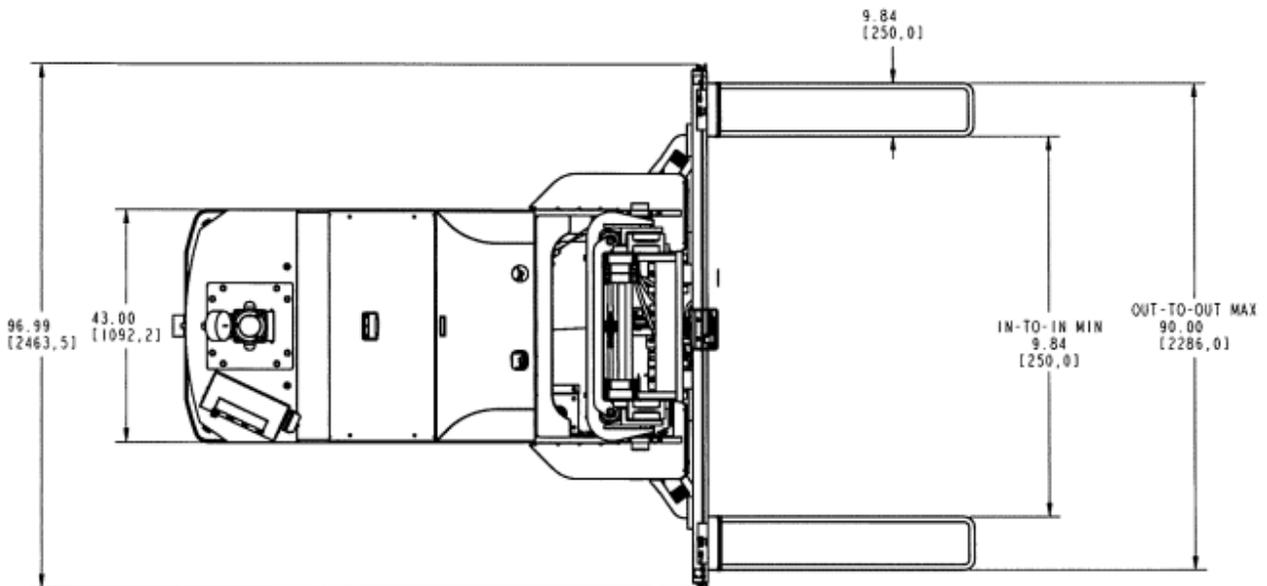
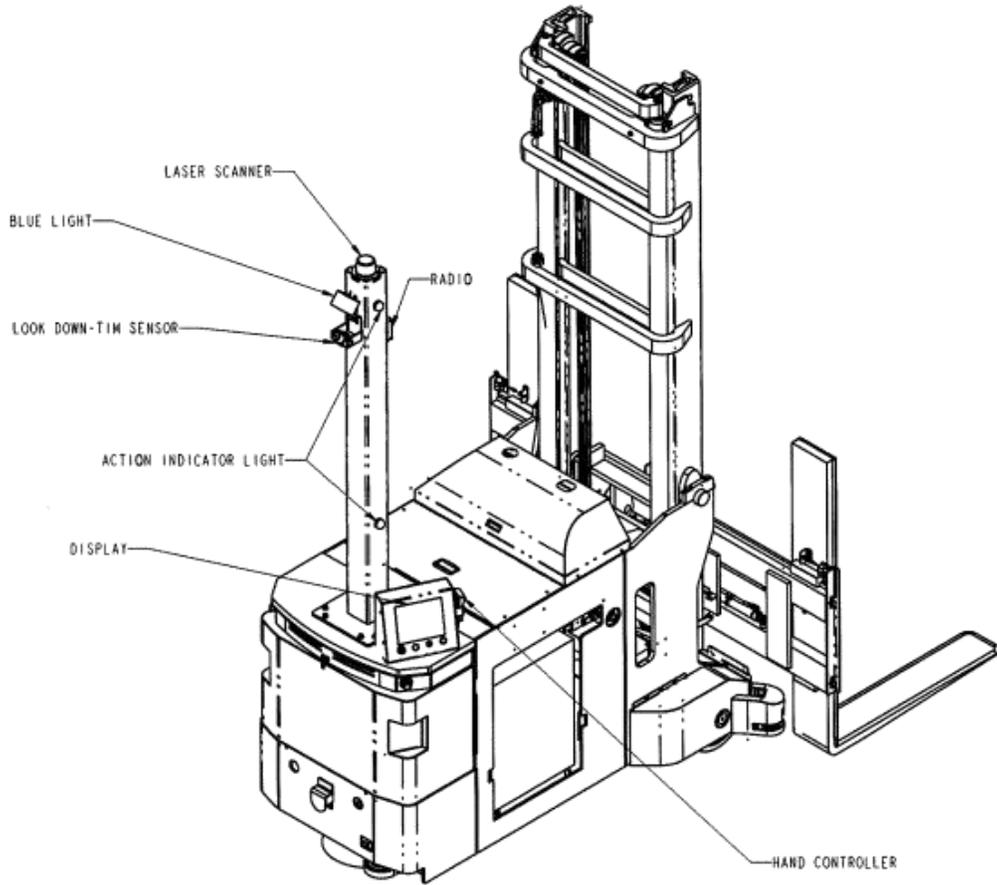


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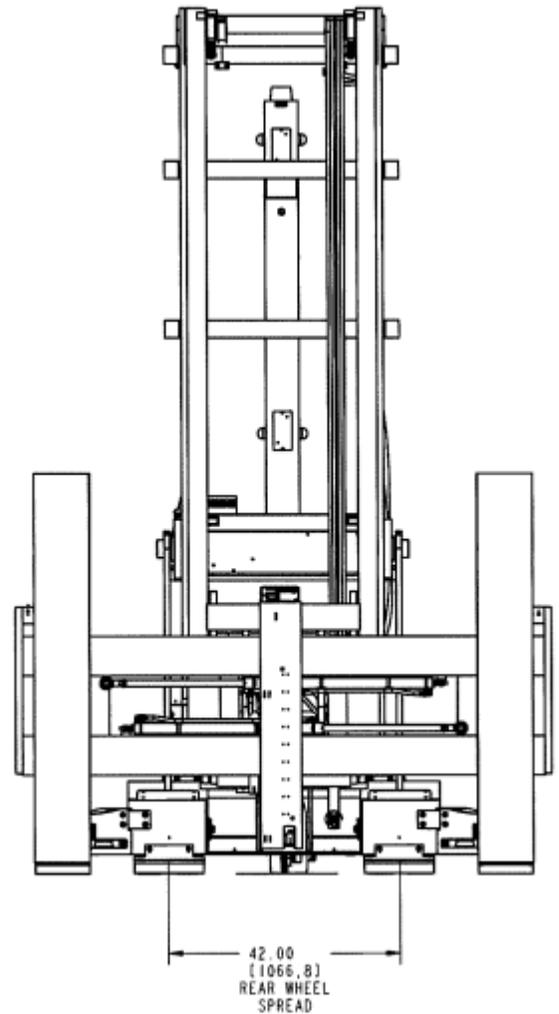
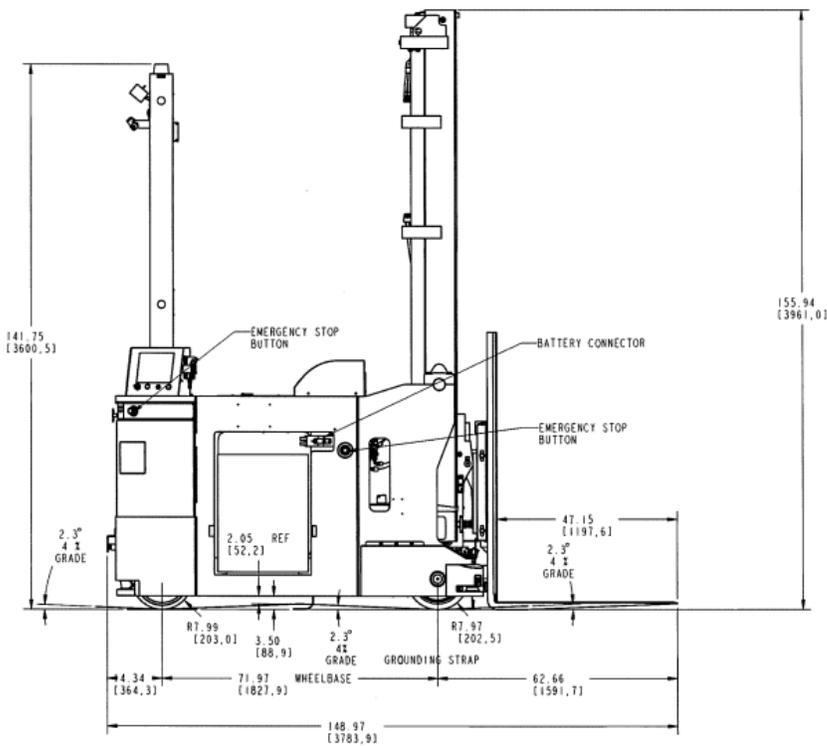
**Rear Bumpers (2)**  
Sick Type S300s that allows for multiple stop and slow fields based on vehicle speed and area of operation.



# Vehicle Specifications



## Vehicle Specifications



### TECHNICAL SPECIFICATIONS

**DRIVE** Electric Drive

**OPERATING POWER** 48VDC, Battery-powered

**BRAKES** Electromechanical

**LIFT POWER** Hydraulic

**BATTERY TYPE** Sealed Lead-Acid, Lilon

**TRAVEL** Bi-directional; 2.0 m/s

**CONTROL** Laser-guidance/natural (automatic); pendant controller (manual)

**CARRYING CAPACITY** 4,530kg

**VEHICLE WEIGHT** 7,870kg with battery ; 6,740kg without battery

**SAFETY FEATURES (STANDARD)** Flashing Lights, Emergency Stop Buttons, Obstacle Sensing Bumpers, Horn