

ECKHART

For the life of your line.

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AUTONOMOUS GUIDED
VEHICLES (AGVs)

TD5000

High capacity with unmatched maneuverability, the TD5000 is ideal for dependable transport of large and bulky loads

PRIMARY APPLICATIONS

Assembly - Flexible build-line conveyance

Kitting - Collection of parts for assembly

Staging - Lineside delivery of components

Transfer - Loading dock to warehouse

KEY FEATURES

1

Industrial-Grade Construction

Reinforced and welded steel structure provides strength and stability for heavy duty drive and steering units

2

Natural Feature Navigation

BlueBotics™ technology package for best-in-class navigation in complex plant environments

3

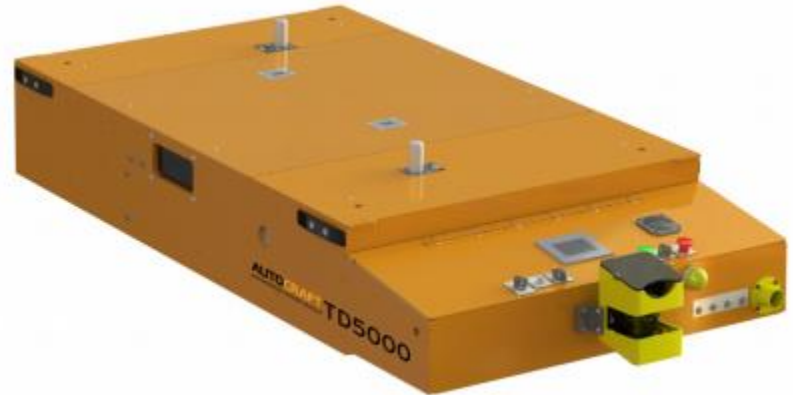
Safety-Rated Performance

Equipped with safety-rated scanners and zone programming to avoid collisions while minimizing false positives

4

Industry-Standard Components

Powered by Allen-Bradley PLC, Proface HMI, and Keyence laser scanner that are familiar to every plant team



ATTACHMENTS

Robots



Top-deck and companion frame mounted options

Frames



Standard and custom designed load frames for application-specific payloads

Trunnions



Rotate product 360 degrees for operator access and ergonomics

Conveyors



Power-rollers to interface with facility conveyor systems

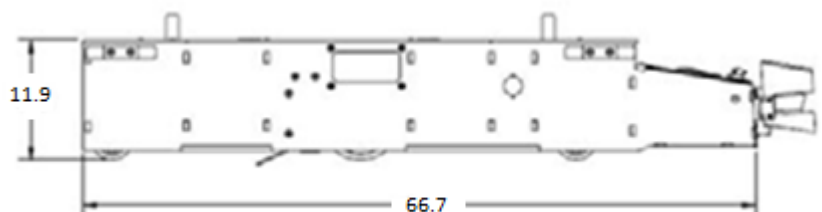
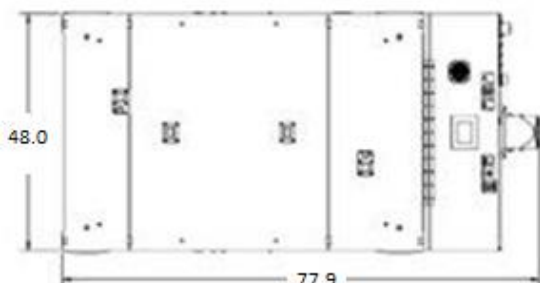
Lifts



Scissor lifts to pick up, drop off, and elevate product to ergonomic work heights

Advanced Material Handling & Assembly Systems for Modern Manufacturing

Size and Weight	Dimensions	77.90 x 48.00 x 11.88 in. (1,978.6 x 914.4 x 301.6 mm)
	Mass	1,400 lbs (635 kg)
Speed and Performance	Maximum Speed	150 feet per minute (0.76 m/s)
	Maximum Acceleration	30 in/s ² (0.76 m/s ²)
	Maximum Deceleration	-30 in/s ² (0.76 m/s ²)
	Minimum Turn Radius	0 inches / 360 Degree
	Positional Accuracy	+/- 0.5 inches (13 mm)
	On-Deck Load Capacity	3,500 lbs (1588 kg)
	Towing Load Capacity	5,000 lbs (2268 kg)
Power and Charging	Drive Voltage	24 VDC
	Drive Power	1,400W - Dual independent 700W drive wheels
	Battery Capacity	124 Ah (4 x 62 Ah batteries in series parallel)
	Plug-in Charging	40 A on-board standard
	Automatic Charging	40 A standard (higher available)
Control and Communication	Control Hardware	Microprocessor (MPU) or Allen-Bradley CompactLogix
	User Input Interface	Proface HMI, program port, control pendant
	Communication	Radio (900 MHz or 2.4 GHz), WiFi (5 GHz), UWB
	Audio / Visual	Programmable sound module, LED indicator light
	Traffic Control	Cart-to-Cart RF and/or Master Control Panel (MCP)
	Configurable I/O	12in/8out (MPU), 6in/8out (PLC), expandable
	Plant Data / IIoT Connectivity	Compatible with Ignition, FactoryTalk, and ThingWorx
Environmental Requirements	Temperature Range	45 to 95 F (7 to 35 C)
	Humidity Range	25% to 95%, non-condensing
	Floor Vertical Cracks/Gaps	0.25 in. (6 mm) max.
	Floor Horizontal Cracks/Gaps	0.25 in. (6 mm) max.
	Floor Flatness	1.5 degree and 1/2 in. within 5 ft.
	Floor Friction	0.6 static coefficient min., no loose debris
	Floor Conductivity	Static Dissipative, <5 x 10 Ω



Note: Actual AGV weight and performance values will vary by application and AGV configuration. Listed technical specifications for reference only. [Please e-mail RFQ@ECKHARTUSA.COM](mailto:RFQ@ECKHARTUSA.COM) for more detailed application engineering.