

## PRIMARY APPLICATIONS

ASSEMBLY  
KITTING  
STAGING  
TRANSFER

Flexible build-line conveyance  
Collection of parts for assembly  
Lineside delivery of components  
Loading dock to warehouse



### AUTONOMOUS GUIDED VEHICLES (AGVS)

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

## 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

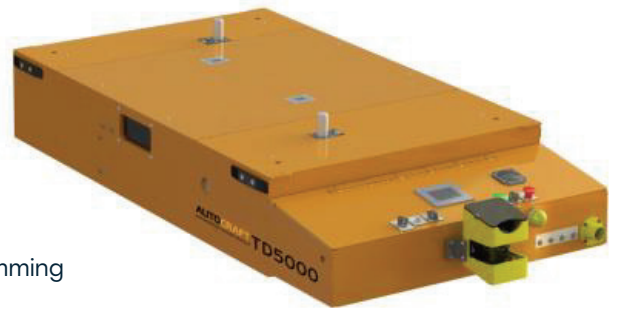
### SAFETY-RATED PERFORMANCE

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 conveyer systems

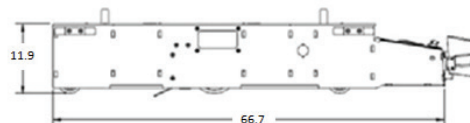
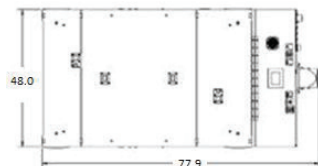
### LIFTS



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

# TECHNICAL SPECIFICATIONS

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 <sup>2</sup> (0.76 m/s <sup>2</sup> )
	MAXIMUM DECELERATION	-30 in/s <sup>2</sup> (0.76 m/s <sup>2</sup> )
	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
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 / LLOT 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, <math>5 \times 10^9 \Omega</math>



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 for more detailed application engineering.