STANDARD AND OPTIONAL FEATURE	S:		
		STD	Optional
GENERAL FEATURES:			
Start and Stop Switches	For ease of use and ergonomics	•	
Color Touch Screen	Full Color 5.5" TFT, LCD Display	•	
Uni-directional	Fully Automatic Forward Travel	•	
Bi-Directional	Fully Automatic Forward and Reverse Travel		•
Guidance System	Magnetic Tape, for flexible guide path changes	•	
Vehicle can be moved manually without power	For Easy handling in emergencies or for preventive maintenance	•	
Standard AGC and Custom System Documen-	To meet your company's needs	•	
AGC Warranty	One Year, does not include batteries and wear and tear items	•	
Extended AGC Warranty			•
Customized Configurations	To meet your needs		•
SAFETY:			
ANSI B56.5 safety standard		•	
Object Detection Sensor	Front Mounted Safety Rated Object Detection Sensor	•	
Brakes	For quicker stopping and parking	•	
E-Stop	Removal of all motive power and lock brakes	•	
Emergency Stops and Buttons	Front Mounted "E" stops	•	
PERFORMANCE PARAMETERS			
Forward Speed	Maximum Speed .8 m/s (2.62 ft/s)	•	
Standard Programmable Speed Settings	9 Variable settings	•	
Acceleration Rate	0.5 m/s² (1.64 ft/s²)	•	
Deceleration Rate	0.5 m/s² (1.64 ft/s²)	•	
Positioning Accuracy	± 10 mm (.39 in)	•	
Other Performance Parameters			•
SYSTEM:			
Guide Path	Continuous loop with branching and multiple spurs	•	
Off board Control System	Stationary PLC, Software-Branching & Speed Control		•
Communication	RF, Ethernet, or Wireless		•
Proximity sensors	Detect Stop and Deceleration Plates		•
RFID Reader and RFID Tags	Floor Mounted RFID Tags and Vehicle Mounted RFID Reader		•
Optical Data Coupler			•
Global Start and Stop Function	To maintain TAKT		•
Remote Start Function	Operator can start vehicle remotely by pressing button		٠
BATTERIES AND CHARGING:			
Battery Quick Disconnect		•	
Battery Access	Ergonomically Designed, Side Access	•	
Lift Assist Batteries			•
Opportunity Charging			•
Various Battery Configurations	Based on Run Time and Life-Cycle Requirements		•



## **TJ Series JACK-PIN** AUTOMATIC GUIDED CARTS (AGC)







# LONGER RUN TIMES • LONGER LIFE • QUICK ROI



**3400 LATROBE DRIVE** CHARLOTTE, NC 28211 (704) 362-1115

INFO@TRANSBOTICS.COM WWW.TRANSBOTICS.COM



#### TJ Series—Jack-pin **Automatic Guided Carts (AGC)** Advantages:

- Eliminates Single Point of Failure (Redundancy) compared to traditional assembly systems
- Easy to Install, Flexible Configurations, and Modifications
- Quick Payback (Return on Investment)
- Increased Productivity with Reduced Costs
- Easy Integration with Your Equipment
- 24/7 Support from Transbotics via phone or ٠ online
- Various Configurations to meet your needs Latch Mechanism is adaptable to your current equipment

### The TJ Series is a flexible vehicle that can be used in:

- Assembly Systems—Moving Products through the Production Process
- Supermarket & Kitting— Collecting Parts for Assembly
- Line Fulfillment/Staging— Delivering Carts/Parts for Production Processes
- Finished Goods—Transfer from Manufacturing to Warehouse or Dock



The TJ Series cart has a dual motor drive assembly and a drive assembly lift motor. The drive assembly is lifted and nested when the power is off. An AGC can be moved about manually by hand, without requiring any additional equipment, once the power is off.

The battery and electronic controls components are conveniently located within the front of the AGC. An operator or technician has easy access to the battery and controls from the top side of the AGC.

The TJ Series, in its basic form, has semi-automatic functions or it can be scaled up to a fully automatic vehicle performing complex orders and routing. The vehicle top is clean and uncluttered, enabling the AGC to drive underneath a stationary load. The AGC can then raise its Jack-pin to couple with the load, or simply drive on through, beneath that load, to the next appropriate stop location. The AGC can then raise its Jack-pin, couple with the next load, and in turn proceed to the desired drop location. Upon reaching that location the AGC can automatically unhitch the load and then proceed with the next move order.

The foot activated start-stop control buttons are ergonomically forgiving. The common vehicle functions can be managed without bending or stooping. The Jack-pin can be operated manually or allowed to function fully automatically. Therefore, the AGC can hitch and unhitch a load without any operator involvement.







#### **NAVIGATION:**

The guidance system utilized in a Transbotics AGC system is either surface mounted magnetic tape or below grade flexible bar magnet.

This navigation method is ideal in applications requiring the flexibility of regular guide path changes. It is accurate to plus or minus 10 mm and changes can be made in real time.

Little training is required to implement guide path changes or to create entirely new guide paths. Multiple guide paths or guide path spurs can be created and utilized with a fully programmable AGC system. A fully programmable AGC system requires no operator input once the system is initialized.

It's simple, cost effective, and the least expensive AGC tugger system available today.

#### **GUIDANCE SYSTEM:**

