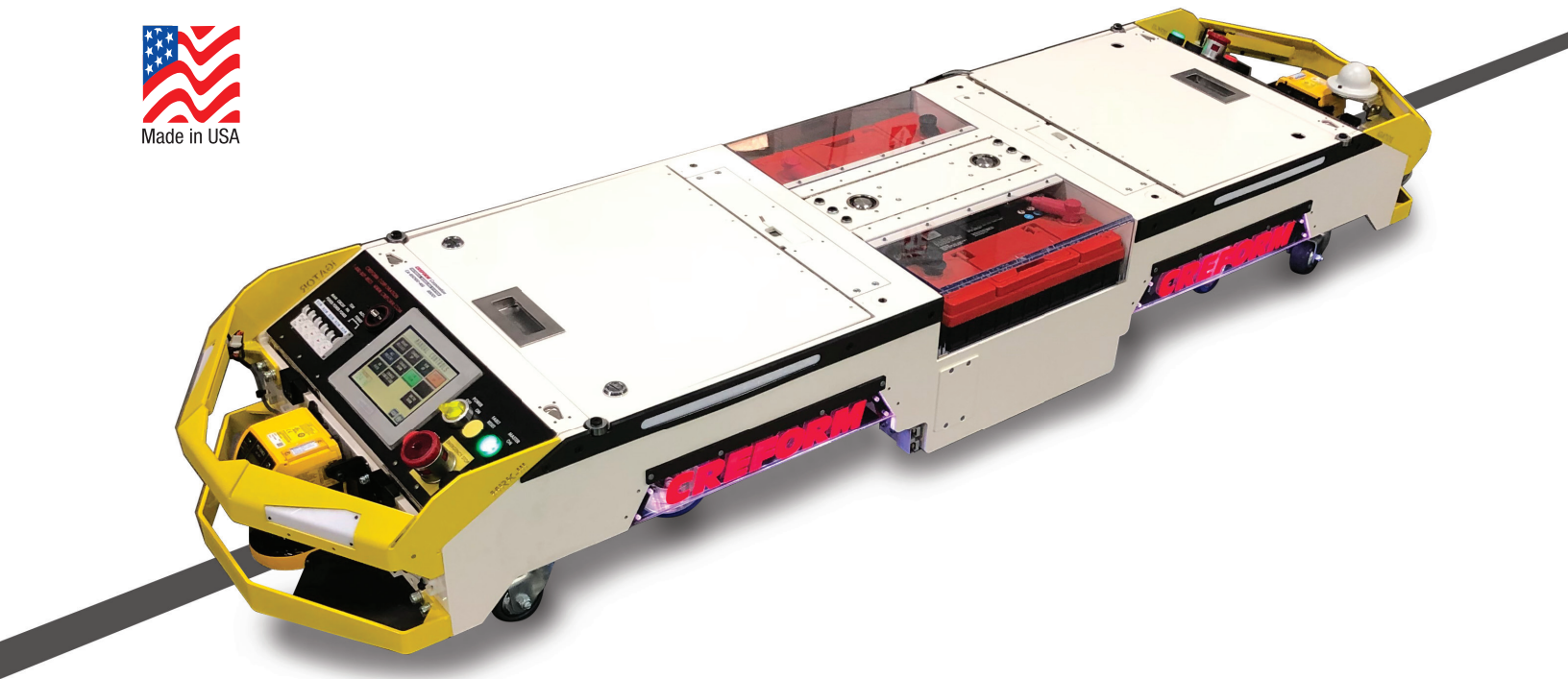


AUTOMATE A FLEET OF CARTS WITH THE ENHANCED CAPABILITY OF A BI-DIRECTIONAL NSI AGV



The Creform Bi-Directional AGV — Model No. CA-B50100-NSI

A Creform NSI bi-directional AGV works as an automated tugger, traveling along a magnetic tape guidepath, slipping under a stationary cart from either direction and when necessary rotating in place. The dual drive wheels also give this AGV higher load capacity and the ability to travel laterally. A tow pin extending into the cart's frame conveys it to a designated workstation or unload point. One NSI AGV has the ability to mobilize multiple carts or a series of NSIs can manage an entire fleet.

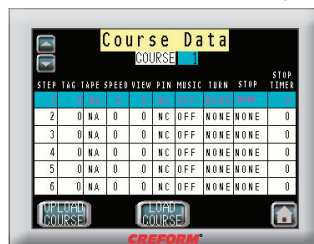
The Creform model offers the most sophisticated control system available in NSI style AGVs and it's manufactured in the U.S.A. The NSI model is programmable and can control 50 courses with up to 128 commands for each. Course programming can be accomplished with PC or an HMI (Human Machine Interface) touchscreen located on the front of the unit. Programs can be downloaded via USB memory, Ethernet cable or RF (requires optional equipment). It's available with an optional onboard RF communication device for traffic management, and just like all Creform units it responds to tape commands on the floor.

- PLC with HMI touchscreen.
- 50 course 128 command control, programming by PC or HMI.
- Onboard RF for traffic management. (Optional)
- Safety — audible warnings and flashing lights, obstacle sensors, non-contact laser bumpers and e-stop (emergency stops, temp stops, temp slows, 16 view sets), safety category 3.
- 24 Volt Power — full shift run under capacity load typical. Quick connector for charging. Auto charge optional.
- Powered drive wheel engage/disengage.
- Follows magnetic tape guidpath.
- RFID reader for command initiation. Command tapes initiate AGV functions such as speed changes, turns and extend/retract tow pin.
- Standard 8 bit optical communication device. Often used for remote starting.
- Service & Support: Programming, plus cart/structure designs, kitting or assembly assistance along with route layout installation available from Creform.
- Optional remote control via smart device.

Sample HMI Screens



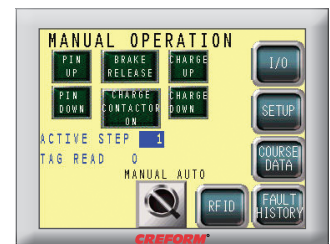
I/O Monitor



Course Program



Auto Operation

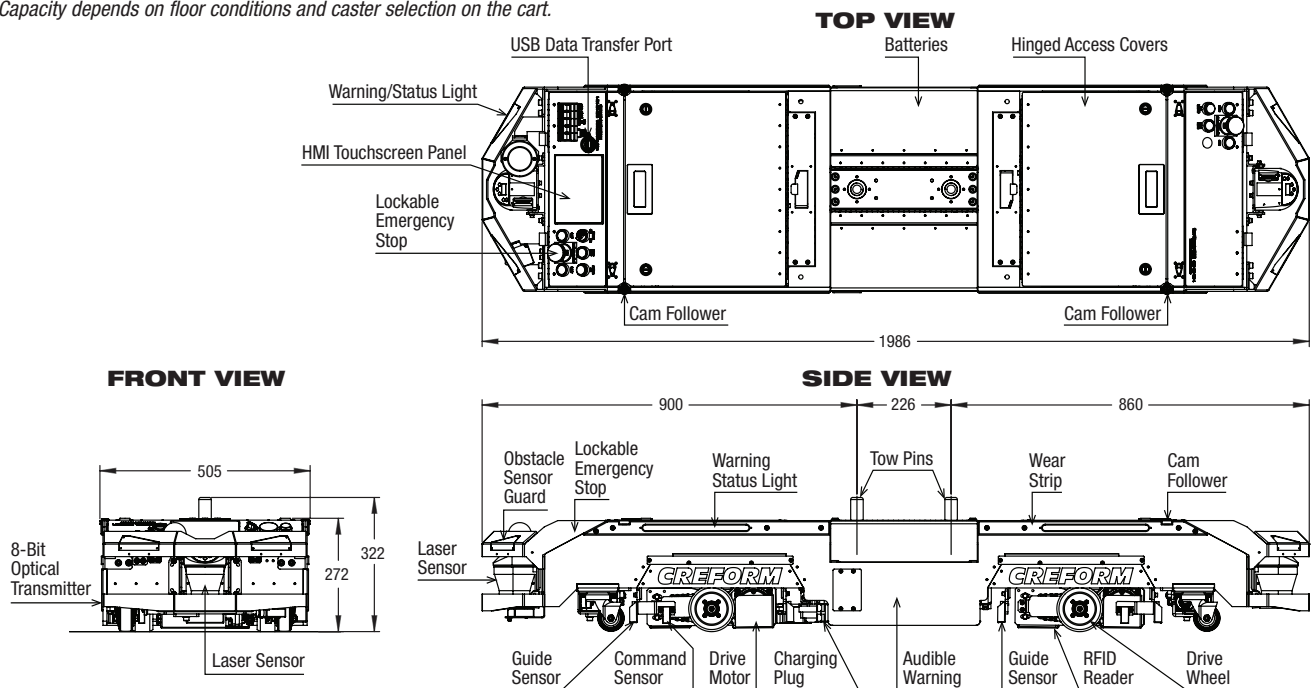


Manual Operation

CREFORM CA-B50100-NSI AGV SPECIFICATIONS

Part number	CA-B50100-NSI
Guidepath	50mm wide Creform magnetic tape and/or 6mm wide embedded magnetic strip
Direction/speeds	Bi-directional, lateral & spin. 4-50m/min (13 to 164 ft/min)
Braking system	Regenerative braking, electromechanical emergency & parking brake
Minimum turning radius	800mm R (31.5" R). 300mm only for lateral travel in slow speed
Power supply	24V DC (two 12V batteries) - 100 AH for typical 10 hrs of run time, optional opportunity charging
Control method	Magnetic command tapes, RFID tags, PLC with HMI touchscreen for on board control 50 course, 128 command control, onboard RF for traffic management (optional)
Floor condition	Surface roughness 10mm or less between min. & max. height slope 1% or less; step 2mm or less; trough 10mm or less
Usage conditions	Indoor only; 0-40°C, 32-104°F; 30 to 80% humidity - no dew formation
Safety devices	Audible warning, flashing lights and e-stops, non-contact laser bumpers at both ends (temp slow, temp stop & e-stop with 16 view sets), safety category 3
Protective circuits	Over current prevention on motor (protected by motor driver) Over current protection on power source (15A breaker)
Draw bar/load capacity	45kg (100lb)/1000kg (2200lb)* - includes cart plus AGV
Tow pin	30mm shaft OD/approximately 50mm vertical stroke
Unit weight/with batteries	220kg (485lb)/290kg (640lb)

*Capacity depends on floor conditions and caster selection on the cart.



ISO 9001: 2015 CERTIFICATION

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