AUTOMATE A FLEET OF CARTS WITH JUST ONE BST AGV TUGGER.

The Creform BST AGV Tugger — Model No. CA-250060-NSI-K9

A Creform BST AGV works as an automated tugger, traveling along a magnetic tape guidepath, slipping under a stationary cart, extending a tow pin into the cart’s frame and then conveying it to a designated workstation or unload point. After disengaging from the cart, it travels to its next assignment. One BST AGV has the ability to mobilize multiple carts or a series of BSTs can manage an entire fleet.

The Creform NSI model offers the most sophisticated control system available in BST 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 BST units it responds to tape commands on the floor. For safety, the NSI model has all standard Creform safety devices plus a new laser scanner that has emergency stop, temp stop and temp slow settings in 16 view sets.

- Made in USA.
- PLC with HMI touchscreen.
- 50 course 128 command control, programming by PC or HMI.
- Onboard RF for traffic management. (Optional)
- Safety — audible warning and flashing light, obstacle sensor, non-contact laser bumper and e-stop (emergency stop, temp stop, temp slow, 16 view sets), safety category 2.
- Easy access engage/disengage lever.
- Follows magnetic tape guidepath.
- 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.

Sample HMI Screens

*Unit shown with optional equipment*
**CREFORM CA-250060-NSI-K9**

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Part number</th>
<th>CA-250060-NSI-K9</th>
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<tbody>
<tr>
<td>Guidepath</td>
<td>50mm wide Creform magnetic tape and/or 6mm wide embedded magnetic strip</td>
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<tr>
<td>Direction/speeds</td>
<td>Forward/Reversing; Est. 3-50m/min (10 to 164 ft/min) / 5m/min (16ft/min)</td>
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<tr>
<td>Braking system</td>
<td>Regenerative braking, electromechanical emergency &amp; parking brake</td>
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<tr>
<td>Minimum turning radius</td>
<td>Est. 400mm R (15.7&quot; R) - 180° turn</td>
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<tr>
<td>Power supply</td>
<td>24V DC (two 12V batteries) - 50 AH for typical 5 hrs of run time, optional opportunity charging</td>
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<tr>
<td>Control method</td>
<td>Magnetic command tapes, RFID tags, PLC with HMI touchscreen for onboard control. 50 course, 128 command control, onboard RF for traffic management (optional)</td>
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<tr>
<td>Floor condition</td>
<td>Surface roughness 10mm or less between min. &amp; max. height slope 1% or less; step 2mm or less; trough 10mm or less</td>
</tr>
<tr>
<td>Usage conditions</td>
<td>Indoor only: 0-40°C, 32-104°F; 30 to 80% humidity - no dew formation</td>
</tr>
<tr>
<td>Safety devices</td>
<td>Audible warning, flashing light, obstacle sensor, non-contact laser bumper and e-stop (emergency stop, temp stop, temp slow, 16 view sets), safety category 2</td>
</tr>
<tr>
<td>Protective circuits</td>
<td>Over current prevention on motor (protected by motor driver) Over current protection on power source (15A breaker)</td>
</tr>
<tr>
<td>Draw bar/load capacity</td>
<td>Est. 26kgf (57lb)/600kg (1320lb)* - includes cart plus AGV</td>
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<tr>
<td>Tow pin</td>
<td>30mm shaft OD/approximately 50mm vertical stroke</td>
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<tr>
<td>Unit weight/with batteries</td>
<td>Est. 74kg (163lb)/96kg (212lb)</td>
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</tbody>
</table>

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

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**Hinged Access Covers**

- Lockable Emergency Stop
- USB Data Transfer Port
- Wear Strip

**TOP VIEW**

- 1041
- Hinged Access Covers

**SIDE VIEW**

- 445
- Tow Pin
- Guide Sensor & RFID Reader
- Command Sensor
- Drive Wheel

**FRONT VIEW**

- 378
- 381
- 423
- Warning Status Light
- 8-Bit Optical Transmitter

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**ISO 9001: 2015 CERTIFICATION**

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**CREFORM MATERIAL HANDLING SYSTEMS**

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