



DC-10

Product DataSheet

Automatic transportation cart ideal for use in healthcare, hospitality and other applications with automated processes.

Savant Automation's DC-10 Automatic Guided Vehicle is a compact load transporter. The new generation design incorporates the latest technologies and features that customers have stressed are important for automated material handling systems. The AGV can be provided with various configurations to adapt to most any application.

Standard Cart Features:

- Fully automated operation
- SMART AGV onboard routing and traffic control logic
- Auto-return to battery charge area when battery is low
- Onboard diagnostic mode for fast, easy troubleshooting
- Controls are mounted to allow easy accessibility
- Remove / Enter on path anywhere without resetting controls
- Pendant control for off-path manual operation
- Rugged steel frame construction for industrial environments

Drive Under 'Tunnel' Cart Transportation

The DC-10 has an extremely low profile allowing it to drive under pre-positioned carts. This is ideal for hospital cart transportation systems, assembly sequence operations where the work pieces are on their own carts, and applications where carts need to be picked up and dropped off automatically.



Material Transportation

The DC-10 is suitable for many material transportation applications, including use in manufacturing, distribution, commercial, hospitals, clean rooms, etc. The vehicle can be used for material movement between work cells, from palletizer to stretch wrap, from packaging to shipping, from receiving to storage, and as a cart transfer device. It can transport racks, pallets, roll stock, slip sheets, trays, totes, food, laundry and supply carts, as well as Gaylord containers. This highly

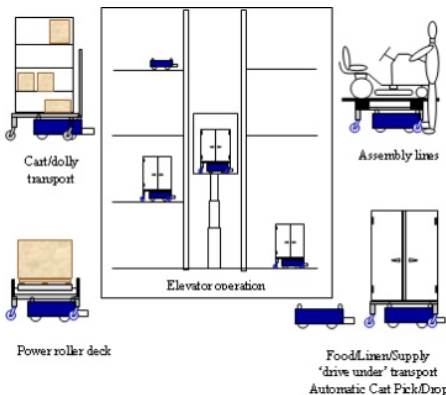
maneuverable AGV can safely travel in high traffic areas and in space-restricted areas.

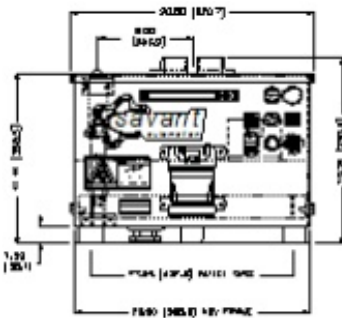
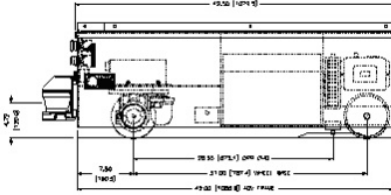
Assembly Lines

When used for assembly line production systems, the DC-10 can transport a work piece through a multi-step assembly process. Assembly operations take place directly on the DC-10 which would be equipped with the desired mobile work table platform. The control system can be integrated with a user's production control system to insure the AGV is released for a work station only when the required assembly operations are completed.

The DC-10 is available with the state of the art Savant Automation Virtual Path navigation using a solid state inertial sensor to determine AGV heading and positional information. This is ideal for environments where magnetic/optic floor tape or laser targets are not desirable. The onboard vehicle computer controls navigation, communication, drive control, load deck or work piece logic control and safety systems.

The DC-10 is also available with Savant Automation's revolutionary Q-CAN™ system controls. Q-CAN (Quick Configurable Automation) utilizes a standard PC program that permits quick, easy system design, and allows users to make changes to their own AGV systems.





BATTERY INFORMATION

Battery AH:

- Two (2) 12V
- 105 amp-hour sealed (maintenance free)

Battery Cycle:

- 8 hours minimum based on
 - standard duty cycle of 20% idle
 - 40% in motion full speed loaded
 - 40% in motion full speed unloaded

Charging Method Options:

- Off board
- Built-in charger
- Optional automatic charging

DISPLAY/CONTROL PANEL FEATURES

- Easy to read, 40 characters by 2 line display
- Status, prompts and error messages displayed
- Displays AGV's current status (on path, low battery, etc.)
- Easy to customize for special applications

WARNING AND SAFETY DEVICES

- Front poly-carbonate plastic bumper
- Emergency stop buttons
- Audio beeper while AGV is in motion
- Flashing warning lights while in motion

OPTIONS

- Automatic cart/dolly capture, transport and release
- Elevator interface
- Automatic reversing
- Q-CANTM System Controls
- Remote vehicle management and dispatching
- Automatic charging
- Turn signals
- Programmable laser scanning safety bumper
- Custom load handling configurations
- Dual range object detection
- Stainless steel finish.

MECHANICAL SPECIFICATIONS

Towing Capacity: 2,000 lbs.

Load Type: Application specific – Cart Towing, Conveyor - Chain, Roller, or Lift Deck

Drive Configuration: Single Wheel Drive with two rear casters

Steering Configuration: steered-wheel with fixed load wheels.

Drive Motor: .13KW permanent magnet motor

Drive Wheel: 5.9" (159mm) diameter x 2" (50mm) wide Vulcolan

Caster Wheels: 6" (152mm) diameter x 2" (50mm) wide

Frame: Unitized structural steel

Brake: Electric, fail-safe

Manual Operation: Pendant control

Approx. Weight: 350 lbs.empty

Speed in Automatic: 200 fpm max. (61mpm, 2.3 MPH);16 speed ranges, reduced speeds in required areas

Turning Radius: 3' minimum

CONTROLS SPECIFICATIONS

Controls: Microprocessor, CAN bus

Electrical System: 24-volt power

Navigation System: "Virtual" wireless navigation (inertial guidance)

Communications: Via Radio Frequency (RF)

Routing and Traffic: Onboard "smart" vehicle control logic

Battery System: Heavy-duty Marine Type AGM battery with discharge sensor

Positioning Accuracy: ? 1" (25.4mm) longitudinal, ? 1" (25.4mm) latitudinal in stands

NOTE:

Specifications are subject to change without notice based on product improvements or technical requirements.