

# EASTMAN

Kingsport, Tennessee

### Features

<b>Date Installed:</b>	September 2006
<b>Vehicle Type:</b>	Fork/Outrigger
<b>Number of Vehicles:</b>	5
<b>Vehicle Capacity:</b>	1,000lbs
<b>Guidance Method:</b>	Laser
<b>Industry:</b>	Chemical Fibers
<b>Load Description:</b>	Raw Material (Pin Carts containing acetate fiber rolls) Empty Pin Carts
<b>Battery Charging Method:</b>	Opportunity
<b>SGV Host Controls:</b>	SGV Manager Windows
<b>Approx. Guidepath Length:</b>	2,500 ft.
<b>Throughput:</b>	23 loads/hour



### System Description

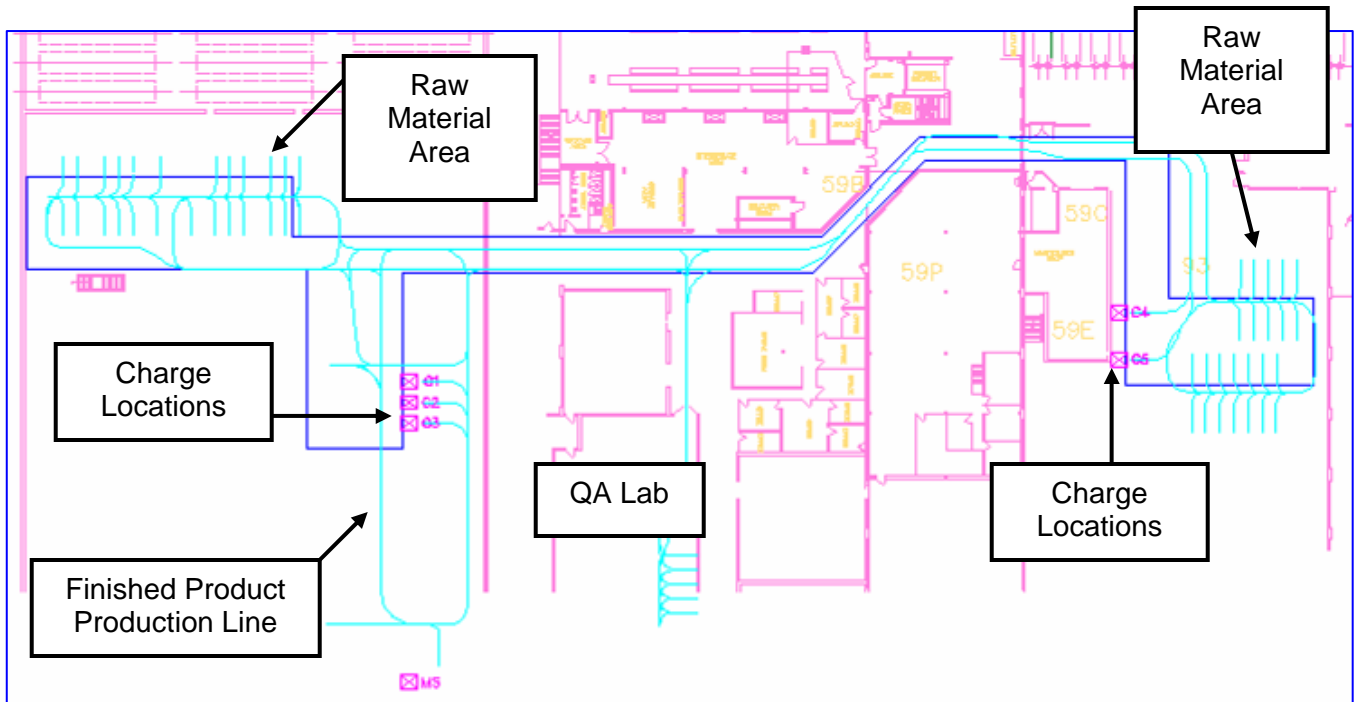
The JBT Corporation Self Guided Vehicle (SGV) System replaced an existing AGV system, and transports aluminum pin carts which contain acetate fiber rolls. All automated load movements are directed by the SGV Manager Control System which communicates with plant I/O devices. A fleet of five forked SGVs transport loads from the raw material production area and delivers them to either the QA lab for inspection, or to the finished product production line. In the raw material area the operator pushes the pin carts into their pick positions, and an overhead I/O sensor detects the cart. This generates a load movement request, and a SGV is dispatched to pick up the load. Empty pin carts are also transported from the finished product production line back to the raw material area.

The SGV system was seamlessly integrated with existing plant equipment including conveyors and a robotic arm system. Within two weeks of arriving on site the SGV system was supporting production. The system runs 24/7 and processes up to 23 loads/hour. The SGV System provided a solution which greatly improved production efficiency, and was much more efficient than the previous AGV system. The system requires minimal supervision and allows employees to focus on value added activities. The customer is delighted with the reliability of the new system compared to the previous system. Operating costs were also significantly reduced, and the expected pay back period is less than three years.

### Benefits

- Improved production efficiency
- Reduced operation and labor costs
- Minimal system supervision
- Safe, Reliable delivery of raw material to production lines

## Plant Layout



*Full Pin Carts in Raw Material Area*



*SGV picks up full pin cart from Finished Product Production Lines*

[www.jbtc-agv.com](http://www.jbtc-agv.com)



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