

## Pressure Sensitive Paper Roll Handling Systems

Two Automated Electrified Monorail (AEM) systems are utilized in this application to transport slit rolls of pressure sensitive paper on specialized carriers without damaging the product. The first monorail system, a LogiTrack LT-40, transports slit rolls from several re-winder machines to one of five wrapping machines, and automatically loads the rolls to the wrapper input conveyors. This allows for product from any of the re-winders to be delivered to any of the wrapping machines and provides improved utilization of the wrappers.

The second AEM system, a LogiTrack LT-20, provides transport of the wrapped rolls from the wrapping machines to one of two order building areas where rolls are sorted and stacked into orders for shipment. These systems were successfully installed and commissioned into a 24/7 operation without significant impact on weekly production. The LogiTrack systems resulted in a 28% throughput improvement for the facility.

Through application of these systems, the customer's objective of eliminating roll handling bottlenecks between consecutive roll finishing operations was achieved, resulting in productivity gains through the re-winders. This increase in productivity eliminated the expense of purchasing additional re-winders that would have been needed to meet production requirements.



### System Overview

- 5,000 roll per day capacity
- Automatic delivery, with 24/7 operation
- Interfaced PC based roll routing and sortation routines with Ethernet communication to the plant host PC to assure proper order fulfillment
- Trolleys had adjustable speed drives with controlled accel / decel rates
- Increased productivity allowed utilization of much of existing equipment

### System Values & Benefits

- Increased paper roll throughput resulting in higher efficiency through the winders
- Less wrappers and shipping area required
- Paper roll damage was greatly reduced
- Less manpower was required
- Improved plant environment
- Implemented without interrupting production
- Annualized cost reduced from \$2.4M to \$650K over a 5 year period

### System Highlights

#### Slit Roll Handling (System #1):

- Delivered slit rolls from any one of nine roll re-winders to any one of five roll wrappers
- Carrier had a built-in 8" hoist
- 12 carriers, 1,225 feet of track
- LogiTrack LT-40 AEM - 8,800lb. load capacity

#### Wrapped Roll Handling (System #2):

- Delivered wrapped rolls from any one of five roll wrappers to any one of four shipping areas
- Carrier had powered roll-on/off capability
- 15 carriers, 365 feet of track
- LogiTrack LT-20 AEM - 4,400lb. load capacity