



## P-Well Automated Paper Warehouse



### Description

#### Receiving to Warehouse

- ◆ Manual Clamp type forklift trucks fitted with radio data terminals remove and barcode scan paper reels from trailers.
- ◆ The reel is deposited in the buffer lane stack. When a lane is filled it becomes available to SGV's to transfer the reels to warehouse locations.
- ◆ 'Warehouse Management Software' instructs the guided vehicles which reel to remove, from which buffer lane, and gives a put away location in a warehouse storage lane.

#### Warehouse to Corrugator

- ◆ Guided vehicles remove reels from warehouse stacks and deposit them directly onto the corrugator input station cradle.
- ◆ Warehouse Management Software provides the SGV with the reel's profile: width and diameter, before directing the vehicle to collect a reel. Automatic mast height adjustment is made so that reels are lifted vertically from the warehouse stacks.
- ◆ Traveling to the corrugator, SGV's will approach from the LH or RH side of the corrugator reels stand input cradle depending on the reel wind required for the particular reel stand.
- ◆ According to wind, reels are rotated +/- 90 degrees by the SGV reel clamp, to a horizontal orientation prior to depositing onto the input cradle.
- ◆ Since the diameter of the reel being transferred is known, the SGV control will calculate the vehicle stopping position so that the reel centerline is directly above the centerline of the input cradle. At this point the reel is lowered onto the cradle.



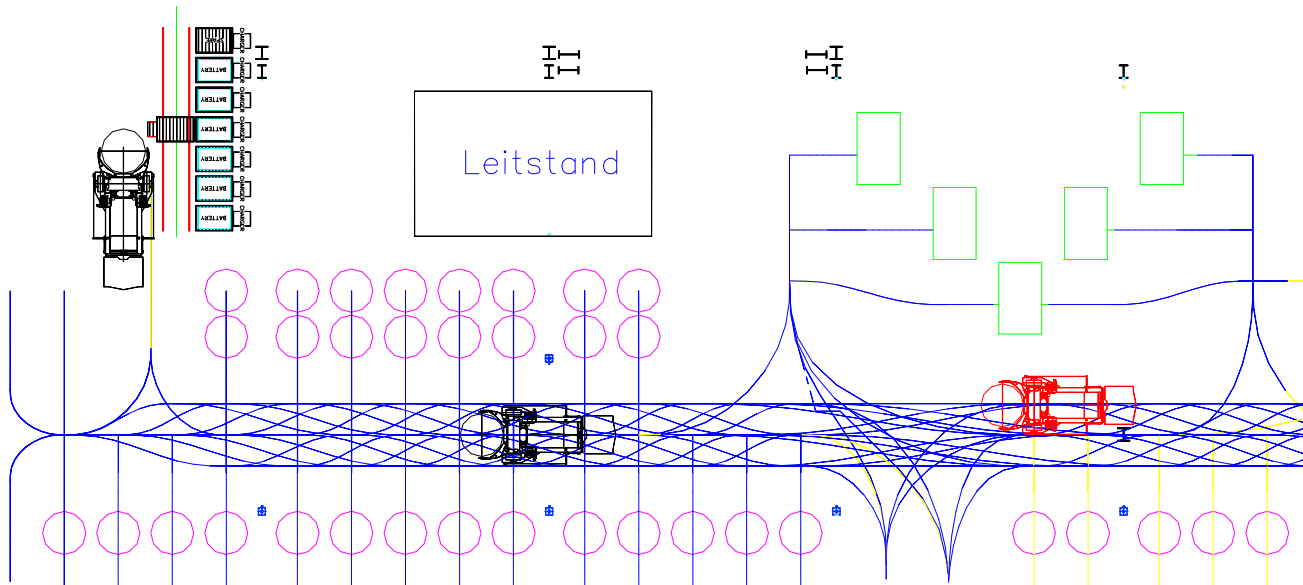
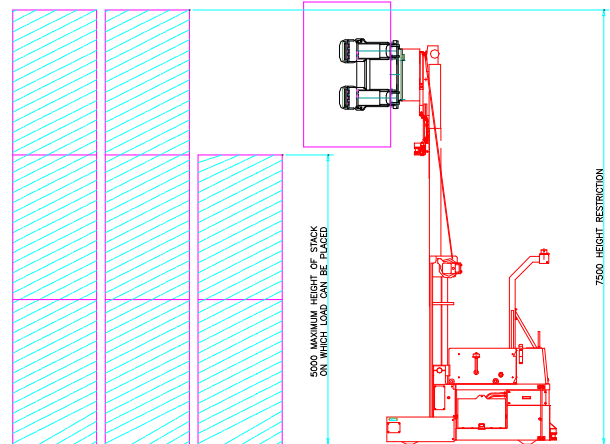
### Benefits

- ◆ Less Roll Damage due to handling
- ◆ Reduced Labor Costs
- ◆ Increased Storage Capacity
- ◆ Increased Safety
- ◆ Streamlined Warehouse Operation

## Plant Layout - Detail

### Features

Date Installed:	2001
Vehicle Type:	Hydraulic Lift with Rotating Clamp
Number of Vehicles:	3
Load Description:	Reels of Paper Max 1500 mm Diameter 2500 mm Width 3500 kg Weight
Industry Description:	Corrugated Paper Warehouse
Guidance Method:	Laser Navigation
Vehicle Capacity:	3500 kg
SGV Host Controls:	Windows 2000 – SGV Manager
Battery Charging:	Off Board Charging (Swap out)
Guidepath Length:	600 m



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