

**We pursue innovation of manufacturing process
by building smart automation system**



Overview

GURU GOBIND SINGH POLYMER ADDITION PROJECT

공사기간: 2018.09 ~ 2020.06

- EURO Pallet Rack #1 : 83,368 Cell
- EURO Pallet Rack #2 : 67,504 Cell
- Single deep Twin fork Stacker crane : 31 Set's
- Two pallet Handling Liner RGV : 2 Set's
- Two pallet Handling Loop RGV #1 : 40 Set's
- Two pallet Handling Loop RGV #2 : 31 Set's

Needs

H MEL is a private-public joint venture with annual output of over 10 million tons of petrochemical industrial complex in Punjab, India. H MEL is producing LLDPE, HDPE & PP which are petrochemical products SMC is constructing ASRS as an additional production line to increase productivity and storage capacity

Solution

SMC provides optimized ASRS by applying stacker crane, RGV, and shuttle system for 25kg-bag and big-bag moving from petrochemical production line to the warehouse. Total of 31 Stacker Cranes and multiple RGVs and shuttles are designed to operate simultaneously, minimizing the time and effort required without interrupting the flow of work. When ASRS is completed, automation of loading and shipment can be achieved with minimum error to come up with maximized logistics efficiency compared to the existing systems.



Equipment Specification



RACK

Rack Supported Building #1

- ✓ Load Beam Type : 83,368 Cell
- ✓ Pallet Size : 1100W x 1300L x 170H
- ✓ Handling Size : 1300W x1500L x1520H, 2220H
- ✓ Load Weight : Max.1070 Kg/pallet

Rack Supported Building

- ✓ Load Beam Type : 67,504 Cell
- ✓ Pallet Size : 1100W x 1300L x 170H
- ✓ Handling Size : 1300W x1500L x1520H, 2220H
- ✓ Load Weight : Max.1070 Kg/pallet

Stacker crane

Twin Fork Stacker crane #1

- ✓ Single Deep Twin Fork Type : 17 Set's
- ✓ Drive Speed : 240 / 5 m/min
- ✓ Lift Speed : 50 / 5 m/min
- ✓ ForkSpeed : 60 / 5 m/min

Twin Fork Stacker crane #2

- ✓ Single Deep Twin Fork Type : 14 Set's
- ✓ Drive Speed : 240 / 5 m/min
- ✓ Lift Speed : 50 / 5 m/min
- ✓ Fork Speed : 60 / 5 m/min

Equipment Specification

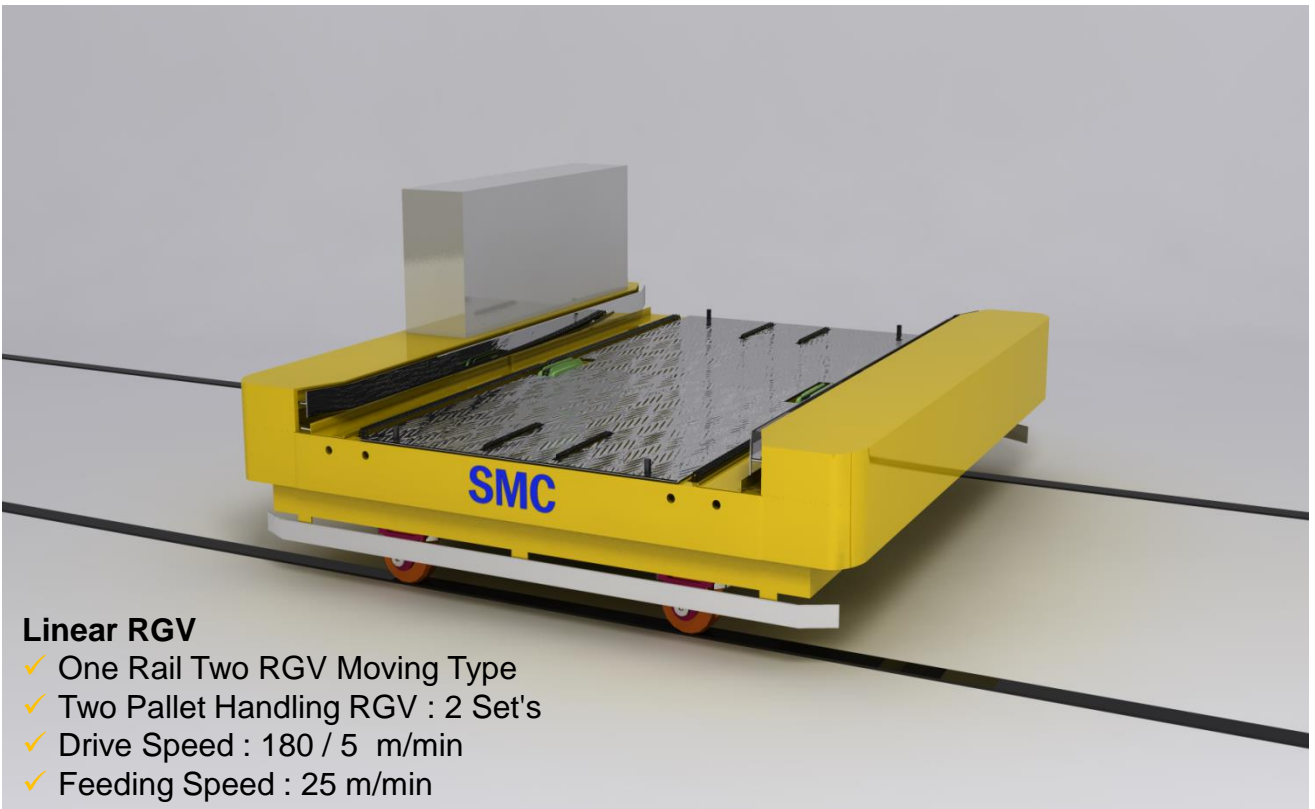


Loop RGV Type #1

- ✓ Two Pallet Handling RGV : 40 Set's
- ✓ Drive Speed : 160 / 35 / 5 m/min
- ✓ Feeding Speed : 25 m/min

Loop RGV Type #2

- ✓ Two Pallet Handling RGV : 31 Set's
- ✓ Drive Speed : 160 / 35 / 5 m/min
- ✓ Feeding Speed : 25 m/min



Linear RGV

- ✓ One Rail Two RGV Moving Type
- ✓ Two Pallet Handling RGV : 2 Set's
- ✓ Drive Speed : 180 / 5 m/min
- ✓ Feeding Speed : 25 m/min