



CASE STUDY_TIRE

HANKOOK TIRE



Company Introduction

Hankook Tire is a leading global tire company in KOREA. Since Hankook Tire was established in 1941, the company has been continuously grow toward global market, and placed 7th place in global tire sales in year 2011.

Expanding of manufacturing facilities over various countries, SMC have been providing Hankook tire with various automation equipment in their global projects.

Afterwards, as a mutually beneficial business cooperation, SMC and Hankook Tire have been maintaining a good relationships for more than 20 years.

PROJECT OVERVIEW

Company	Hankook Tire
Location	Kumsan, China
Load	Tire
ASRS Storage Capacity	12,728 cells
Rack	Rack supported building (Load Arm type)
Stacker Crane	9 vehicles (Single & Dual fork type)
Automated Materials Handling Equipment	13 RGVs, AGV, EMS, GANTRY, Conveyors

EQUIPMENT SPECIFICATION



Stacker Crane

- Traveling speed: Max. 100 m/min
- Throughput: Single - Max. 59.7 Cycle/h
Dual - Max. 106.7 Cycle/h



RGV – Liner Type

- Traveling speed: Max. 200 m/min
- Handling weight : 600kg/pallet
- Control: SMC 5000



Conveyor

- Conveyor Type: Chain, Belt & Roller conveyor
- Handling size: 1600W x 1600L x 1650 H
- Controller: PLC

EQUIPMENT SPECIFICATION



EMS

- Traveling speed: Max. 120m/min
- Hoisting speed: Max. 40m/min
- Handling weight: Max. 300kg
- Turning radius: 1,000 mm



Gantry

- Handling weight: Max. 110kg
- Stack height: Max. 1400mm
- Stack weight: Max. 368kg
- Storage quantity: 100 EA



AGV

- Traveling speed: Max. 60m/min
- Spin Turn: 18m/min
- Drive Type: Double Drive Type
- Power: Battery (Lead Acid)