



CASE STUDY_AUTOMOTIVE PARTS

KIA MOTORS



Company Introduction

Kia Motors started as a small manufacture making bicycle, and has merged as one of the well known Motor manufacturer in Korea. Kia Motors has over 40,000 employees all around the world covering 172 countries with networking distributors and dealers. Kia Motors has risen as a major global motor manufacturer.

PROJECT OVERVIEW

Company	Kia Motors	
	Old	New
Location	Asan, Korea	Hwa-sung, Korea
Load	Automotive Parts	
ASRS Storage Capacity	2,304 cells	488 cells
Rack	Free Standing Rack Type	Free Standing Rack Type
Stacker Crane	4 Vehicles - Euro Fork Type	2 Vehicles - Euro Fork Type
Automated Materials Handling Equipment	450 Conveyors, Auto Lift, 9 AGVs, RGV	63 Conveyors

EQUIPMENT SPECIFICATION



Stacker Crane

- Load weight: Max.250 kg
- Euro fork type
- Traveling speed: 180 m/min
- Forking speed: 60 m/min

AGV (Automated Guided Vehicle)

- Traveling speed: 60 m/min
- Real time control of material flow
- Less space for transportation
- Flexible and advanced navigation systems



RGV (Rail Guided Vehicle)

- Traveling speed: 120 m/min
- Shuttle type
- Independent operation by individual controller on each vehicle

EQUIPMENT SPECIFICATION



Conveyor

- Traveling speed: 12 m/min
- Load weight: 250 kg
- Controller: PLC
- Speed control : Inverter