



Smart Mechatronics Core

# CASE STUDY\_FOOD & BEVERAGE

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**LOGIN BEVERAGE**



## Company Introduction

Login Beverage has vision of providing the best quality of water by producing the water from best source, and providing most quantity by well equipped technological distribution centre. To get close to their vision, Login Beverage selected SMC as their partner to built the AS/RS. SMC designed new AS/RS facility in order to readily adapt or change operations to meet customer demand of Login Beverage.

# PROJECT PROBLEM & SOLUTION

## PROBLEM

Login beverage also was facing a typical problem who need ASRS system. Production area and storage are full of capacity and congested, but space is limited to cover the future growth of production. Also production flow was not efficient and it was frequent to have damaged product by mis-handling. From this project, Login requested increase efficiency of logistic flow and handling process.

## SOLUTION

First rack structure provides more storage, and through long conveyor buffer line also have role of storage while product handling. Accurate operation of stacker crane and RGV decreases rate of damaged product and support more fast product handling. It is expected that well organized operation and systematic connect of each equipment well support the future growth the company planed.

# PROJECT OVERVIEW

<b>Company</b>	<b>Login Beverage</b>
<b>Location</b>	Yeon-Cheon, Korea
<b>Load</b>	Products of Water
<b>ASRS Storage Capacity</b>	5,040 cells
<b>Rack</b>	Free Standing Rack, closed face (load beam type) W 9.7 x L 12.2 x H 15.50 (M)
<b>Stacker Crane</b>	6 Vehicles (Double Deep/Euro Fork)
<b>Automated Materials Handling Equipment</b>	8 RGVs, 73 Conveyors

# EQUIPMENT SPECIFICATION



## Stacker Crane

- Traveling speed: Max. 160 m/min
- Load weight: Max 1,500 kg
- Load size: 1,220 x 970 mm
- Stability of load handling through smooth acceleration & deceleration controls by S-Curve



## RGV ( Rail Guided Vehicle)

- High speed shuttle type
- Accurate positioning by an encoder

## Conveyor

- Traveling Speed: Max. 60 m/min
- Controller: PLC
- Speed control : Inverter