



CASE STUDY _ PHARMACEUTICAL

HANMI PHARM.

Hanmi Hanmi Pharm.



Company Introduction

Hanmi has been successful for a few decades with high flexibility, continuously changing its market and development of strategy for new drug.

During the period of significant changes, Hanmi made multiple strategic to enhance the product management system for the efficient logistic flow delivering the drug in safe and fast manner

PROJECT PROBLEM & SOLUTION

PROBLEM

Now a days, Hanmi pharm Corp (hereinafter, “Hanmi”) grows steadily that requires to increase product availability and cost effective systems. They decided to build AS/RS which help save cost by fewer labor and enhance the picking efficiency with reliable care for safety. The introduction of automated system was expected to maximize the storage capacity of items as well as to improves work capacity overall.

SOLUTION

Provided the optimized storage capacity accommodating 9,640 locations under the limited space with 4 stackers as a 1st project in 2000 and its expansion with 2 stackers in 2006. For the maximized safety storage concerned by the buyer in particular, the room temperature storage features for the raw/subsidiary materials & finished goods as per GMP regulation, a quality management standards in Pharmaceutical industry from the storage to retrieval strictly preventing any possible pollution. Furthermore, the high-tech picking solution, APS & DPS, improved the company’s competitive with the streamlined order fulfillment process.

PROJECT OVERVIEW

Company	Hanmi Pharm
Location	Hwa-Sung, Korea
Load	Raw materials & Finished goods of Medicine
ASRS Storage Capacity	9,640 cells
Rack	Rack supported building, closed face (load beam type) W 30.1 x L 86.1 x H 29.9 (M)
Stacker Crane	6 vehicles (Single fork type)
Automated Materials Handling Equipment	APS(Automatic Picking System), DPS(Digital Picking System), Auto lifter, Conveyor, etc.

EQUIPMENT SPECIFICATION



Stacker Crane

- Load size: W 1,000 x L 1,300 x H 1,700/ 675mm
- Load weight: Max. 1,000 kg
- Traveling speed: Max. 160 m/min
- Single fork type
- Stability of load handing through smooth acceleration & deceleration controls by S-Curve



Conveyor

- Conveyor Type: Roller Conveyor
- Handling weight: Max. 25kg
- Conveying Speed: Max. 40 m/min
- Controller: PLC

EQUIPMENT SPECIFICATION



APS (Automatic Picking System)

- No. of channel: Max. 72 per module
- Dispensing performance : Max. 6 pcs/ sec
- Handling 1,000 boxes per hour
- Collect many individual items from a order with flexibility
- Precise managing by computer brings low error rate



DPS (Digital Picking System)

- Item type: 80~90 types
- Data communication: Barcode
- Picked by light and LED displays
- Quick and simple work process