



Smart Mechatronics Core

CASE STUDY_FOOD & BEVERAGE

S.K. FOOD (THAI LAND)



Company Introduction

The company is a leading Thai producer of canned tuna and seafood products, rolling out an annual 18,000 tons of fish. Tuna and salmon are the principal raw materials of S.K. Foods' business, with its exports consisting mainly of canned, poached, and frozen seafood. The company markets its products domestically under the Seahorse brand name; however, its exports account for 98% of revenue, with Japan, Australia, Canada, Europe, and the Middle East comprising the bulk of sales.

PROJECT PROBLEM & SOLUTION

PROBLEM

S.K. Food requests easily controllable WMS(warehouse management system) because their main product are canned foods. Accurate checking and handling for stock is main issue of warehouse system. Also cameras which can monitor food inside of rack structure is a special requirement from S.K. Food.

SOLUTION

Key solution for S.K. Food is ease control and monitoring of stock inventory. SMC's WMS system provides a strong control power to S.K. Food over inventory management. Also accurate operation of each equipment help the company achieve fast input/output process without damaged product. As the company requested monitoring camera keep watching the condition of inside of storage and support customers are supplied foods under good condition.

PROJECT OVERVIEW

Company	S.K. Food
Location	Thai land
Load	Can Product
ASRS Storage Capacity	5,920 cells
Rack	Free Standing Rack, closed face (load beam type) W 13.7 x L 92.65 x H 21.1 (M)
Stacker Crane	2 Vehicles (Double deep)
Automated Materials Handling Equipment	Conveyors

EQUIPMENT SPECIFICATION



Stacker Crane

- Traveling speed: Max. 160 m/min
- Forking speed: 35m/min
- Load weight: Max 1,000 kg
- Stability of load handling through smooth acceleration & deceleration controls by S-Curve



Conveyor

- Conveying Speed: Max. 30 m/min
- Load Size : W 1,000 x L 1,200 x H 1,550
- Controller: PLC
- Speed control : Inverter