CASE STUDY

Reference Agro Boga Utama, Indonesia: Increasing food logistics efficiency with semi-automated storage solutions

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A FRESH TAKE ON THE FOOD RETAIL LANDSCAPE ACROSS INDONESIA THROUGH TECHNOLOGY

The grocery retail industry is a demanding business with low margins and evolving consumer demands. In this age of rising overhead costs and lower pricing power, retailers are under pressure to rethink their strategies to cope with inventory productivity, optimise operational costs and strive for further efficiency to serve the needs of their customers.

Known as the world's largest archipelagic state with over 17,000 islands, food logistics across Indonesia inevitably present unique challenges. Together with SSI SCHAEFER, Agro Boga Utama steps up its food distribution capabilities to ensure Indonesians with better access to fresh, diverse and affordable foods.



Agro Boga Utama's latest semi-automated facility in Depok, Indonesia



10-pallet-level



Handheld controller to select the aisle required for work

Agro Boga Utama is a distributor of pre-package food, meat and vegetables. Through food retail outlets across all major cities in Indonesia, Agro Boga Utama distributes a variety of food products under its proprietary brand, Meat 'N' Fresh.



To ensure customers received fresh and quality foods, the cold chain ecosystem starts from the logistics process. Agro Boga Utama took the first step into automation by implementing a semi-automated storage and retrieval process to increase the warehouse operations efficiency and capabilities.



"SSI SCHAEFER took us through the first step of our warehouse automation journey. The project was seamlessly executed with no operation disruption to our business.

Using the Mobile Racking System to store and manage the expiry dates of goods, our warehouse process became more efficient and costeffective. The deployment of the FEFO concept also increased the agility of our logistics process, we can now focus on delivering fresh foods quickly into the hands of our customers throughout Indonesia."

Mr. Fajar Elektro Supply Chain GM Agro Boga Utama

THE REQUIREMENTS

Agro Boga Utama wanted to expand the footprint of their retail business and fulfil consumer demands in new areas. In addition to geographical challenges, the new solution has to be designed to handle the market demand for smaller batch orders and accommodate a wider inventory diversity of 1,500 Stock-Keeping Units (SKUs) (approx. 115% more).

Agro Boga Utama understood that the existing manual warehouse operating in a 1,877 m² (3,360 pallets locations) area was no longer efficient in keeping up with the direct distribution demand and business expansion.

To efficiently store, pick and prepare temperature-sensitive products for delivery, the new warehouse system would need to provide excellent space utilisation, handle the goods by their expiry dates and enable picking to be performed within the cooling area with no interruptions in the cooling chain.

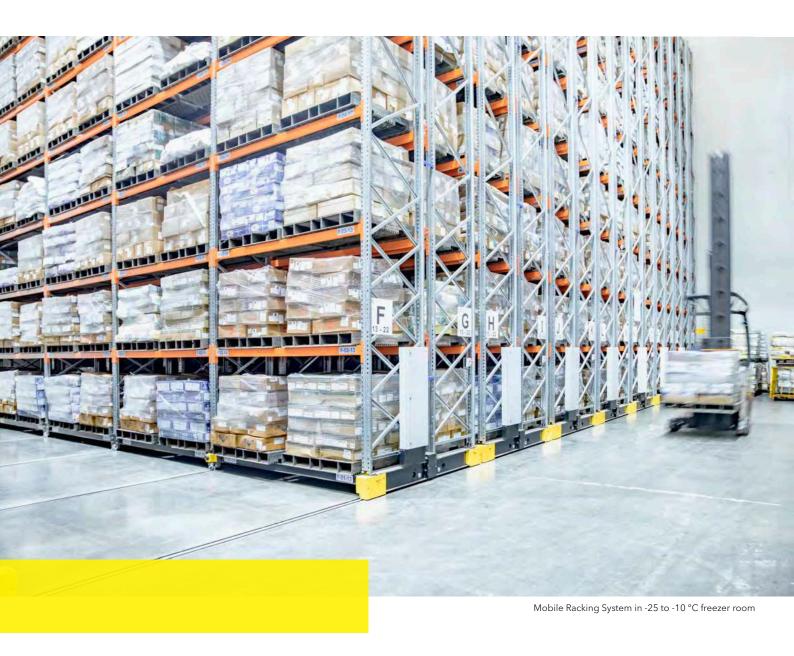


More storage on less space. Learn how you can optimise your space requirement and free up additional room with the Mobile Racking System.

https://pages.ssi-schaefer.com/en-sg/agro-boga-utama_mobile-racking-system







THE SOLUTION

To develop and accommodate for more Stock-Keeping-Units (SKUs), a new facility erected along the existing warehouse was built with a Mobile Racking System (MRS).

Maximum Space Utilisation

Customised to Agro Boga Utama's requirements for the planned storage quantities, turnover and throughputs, the 13-meter-tall Mobile Racking System is located in a 1,078 m² freezer room. By tapping into vertical air space and eliminating the need for individual access aisles found in conventional racking systems, the high-density storage system condenses 4,400 pallet locations into one footprint, significantly increasing the storage capacity by 44% as compared to the conventional racking used in their old warehouse. The compact and dense storage

structure allows Agro Boga Utama to optimise every inch of the cold storage space, thereby bringing the overhead costs down.

Within the open space of the working aisle, the team at Agro Boga Utama can perform both storage and picking activities in the same cold area without interrupting the cold chain, which makes the Mobile Racking System an ideal solution for deep-freeze warehouses.

Food Stock Rotation for Freshness

Part of Agro Boga Utama's goal is to ensure good stock rotation. With 100% access to any stored pallet at any time, the storage of food products can easily be optimised based on the "First Expiry, First Out" FEFO concept.

The new operation saves time on unnecessary and time-consuming process of relocating expiring products, maintain the freshness of inventories and thus prevent food wastage.

Intelligent Safety Measures

While the Mobile Racking System is known for its spacesaving capabilities, its sturdy structure is designed to ensure that all employees work in a safe environment. Furthermore, a series of computerised protective measures are in place to safeguard that the movement of racks does not pose a risk. To ensure accident-free operations, the Mobile Racking System is equipped with a modern programmable logic controller (PLC) with integrated safety features such as the emergency stop switches, manual release systems and safety light barriers located at the front and base of the mobile carriage.



Equipped with both manual stop switch and safety laser device



Ensuring safety in your warehouse operation all year round. Learn how a safer warehouse improves your efficiency in your everyday operations.

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Warehousing and picking can be performed at lower levels

FACTS AND FIGURES

Scope of Supply and Services

System Key Figures	
Mobile racking system warehouse area	1,078 m²
Stock keeping units (SKUs)	1,500
Working hours	16 hours / day
Shifts / day	2 shifts
Orders / day (Avg.)	70

SSI SCHAEFER Mobile Racking System

Specifications	
Specifications Electric mobile racking system (2 areas)	ESX2.0 incl. remote control
	Block 1 area:
	Mobile carriages: 9
	Bays per row: 6 Pallet locations: 2,400
	railet locations. 2,400
	Block 2 area:
	Mobile carriages: 9
	Bays per row: 5
	Pallet locations: 2,000
Pallet load	Max 700 kg / pallet
Height	10 levels of pallets
	Frame height: 13 m
Storage locations	4,400 total pallet locations
	220 total bays



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SIX REASONS FOR CHOOSING SSI SCHAEFER

Stability

As a financially independent family business, SSI SCHAEFER is committed to long-term solutions. You can trust that our team of experts will be there for you today, tomorrow and in years to come.

Efficiency

SSI SCHAEFER solutions are scalable and able to grow with your business. You can always upgrade or retrofit.

Quality

As a systems specialist and original equipment manufacturer, SSI SCHAEFER provides tailor-made and high-quality solutions from a single source, specifically designed to meet your challenges.

Reliability

Thanks to our worldwide Customer Service & Support network, SSI SCHAEFER ensures smooth operation of your system, both during and after installation.

Know-how

SSI SCHAEFER solutions are always up-to-date with the latest technological standards and can be easily integrated into an existing (IT) landscape.

Internationality

As a global organization, SSI SCHAEFER has local offices worldwide. With over 70 operative subsidiaries, our team of experts speak your language.



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