

Case Study

ANGEL
BEAUTY SUPPLY

Reference Angel Beauty Supply (AGL), Thailand:
Warehouse Logistics Makeover
With Cosmetics Packaging Distributor -
Semi-Automated Storage Solution

ssi-schaefer.com

บริษัท อีจล กรุ๊ป
AGL
GROUP

SSI SCHAEFER



AGL's new centralized warehouse of 1,500 m² footprint

First Step Into Automation

Cosmetics packaging distributor Angel Beauty Supply chose SSI LOGIMAT® vertical lift module to automate products retrieval process and increase picking accuracy.

A 150% increase in storage capacity and a 44.4% decrease in warehouse footprint. Small and medium-sized businesses in Asia are opting for semi-automated warehouse operations to better manage the uprising land and labor costs.

Beauty Boom

The global cosmetic packaging industry is projected to grow at a CAGR of 4.1% throughout 2021-2028¹. This growth is contributed by the increased consumer spending power, beauty awareness, and standards globally. With the adoption of internet use and the rise of e-commerce, B2B commerce space in Asia is growing fast and businesses are going omnichannel to increase their sales. One such company is Angel Beauty Supply (AGL), a family-owned business operating out of Thailand - Bangkok City. As a specialist and distributor in cosmetics packaging, AGL is experiencing about a 4% growth in its business annually. The unassuming one-stop shop offers services such as designing, label printing, and packaging of cosmetics and toiletries products to all types of customers, from local Thai start-ups to international brands. Hence, expanding its sales channel from a brick-and-mortar store to an online store is a natural development for AGL to manage its sales operation effortlessly. AGL turned to technology and semi-automated systems to improve its warehouse operation and to ensure there is flexibility in the inventory storage and picking process.



AGL's product range



AGL's retail store at 210, 1-2 Lan Luang Rd, Khlong Maha Nak, Pom Prap Sattru Phai, Bangkok 10100, Thailand

A photograph of the AGL Group office building. The building is white with a blue metal fence in front. A large sign on the building reads "AGL GROUP" in white letters on a blue background, followed by Thai text "บริษัท เอ จี แอล กรุ๊ป จำกัด" and "AGL GROUP CO.,LTD." in white letters on a blue background. A yellow banner is at the bottom of the image.

AGL
GROUP

บริษัท เอ จี แอล กรุ๊ป จำกัด

AGL GROUP CO.,LTD.

AGL's office

The Challenges

Accessing the Right SKUs at the Right Time

Managing inventories out of five different warehouses (Nakornphatom sai 3 and Larnluan - Bangkok) proves to be more challenging than the benefits AGL reaped. All of the five AGL warehouses' storage and picking processes are manual, menial, and labor intensive. To access the right stock keeping units (SKUs), AGL's existing ERP system provides a platform to record the inventory via the SKU categorization and quantity, it does not provide the picker with the good's location. The lack of visibility in the goods positioning impacts the storage process as the stocker scout around the warehouse for available space. The storage method also directly affects the picking and packing operation, with the sales order, the picker requires more time and coordination across facilities to locate the goods. Since the inventories are not stored in one place, it is difficult to have full oversight of the goods, affecting the quality control and picking accuracy of the orders.

With a combined quantity of 3,000 pieces of SKUs from all five warehouses, the coordination of the goods flow makes inventory management tedious and costly. During peak seasons, the order fulfillment process was not the only challenge, but the traffic gridlock in Bangkok city makes logistics and transportation process unpredictable, impacting AGL's goal to create a seamless and positive omnichannel experience for their customers.

The Challenges in Brief

- Decentralized warehouse, complex coordination of goods, and warehouse management
- Laborious picking process
- Unoptimized picking due to storage organization
- Inefficient and picking errors cause returns to become costly to the business
- The current warehouse infrastructure is not future-proof for omnichannel expansion

A Reliable Partner With a History of Successful Long-Term Customers

With a history of successful manual to semi-automated warehouses installations in Thailand, one of SSI SCHAEFER's earliest installation at [Chin Seng Huat](#) inspired AGL to maximize their efficiency, productivity and visibility, while being able to continuously innovate. Choosing SSI SCHAEFER as their intralogistics partner, AGL leveraged SSI SCHAEFER's combined solutions of vertical lift modules, mezzanine racking and WAMAS® LOGIMAT warehouse management software to transit the operation to a semi-automated warehouse.

AGL's new warehouse stands at a height of 22.5 m and comprises a total area of 2,842 m². To accommodate up to 7,500 SKUs, a volume that is doubled of the five previous warehouses put together.



1 600 6-tier mezzanine

Maximized Storage and Semi-Automated Goods-to-Person Picking



AGL's new warehouse premise consists of two different storage areas and systems: Two SSI SCHAEFER vertical lift modules – SSI LOGIMAT® and a 6-tier mezzanine racking. The WAMAS® LOGIMAT warehouse management software seamlessly manages the goods flow between order processing to the outbound delivery.

- Goods-to-person concept
- Improve picking performance and accuracy
- Storage of bulky items and fast-moving goods

Goods-to-Person Concept: SSI LOGIMAT® Vertical Lift Module

The SSI LOGIMAT® is the ideal solution for AGL to scale up their warehouse logistics operation with e-commerce order fulfillment. Perfect for small and loose packs goods such as cosmetics and toiletries packaging, the dynamic vertical lift system that operates on the [goods-to-person](#) principle can achieve an average throughput of 191 order lines per day. Using just 14.12 m² floor space only, each SSI LOGIMAT® effectively holds 92 trays per unit, maximizes the warehouse vertical space, boost the space utilization with no restricted movements and goods replenishment inconvenience.

Free-Standing and Possibly the Highest Vertical Lift Module

AGL's vertical lift module is one of the few tallest vertical lift module structures in Southeast Asia. Standing at a height of 20 m, it not only creates 'additional head space' in the warehouse, but the technology used for the structure construction eradicates the need for special reinforcement (building wall support), almost a plug & play solution deployable to any warehouse.

Intelligent Cabinet Fitted With an Intelligent Software

The WAMAS® LOGIMAT is the inventory management software of the SSI LOGIMAT®. On every shift, different pickers access the system using their designated password. Simply with a touch of the control panel, the software calls the correct tray for either the retrieval or storage of the goods. Compared to the manual storage and picking method, this all-in-one storage and picking process helped AGL reduce a significant amount of time to travel down the aisles of the warehouse to locate the goods. Furthermore, inventory security and stock traceability will no longer be an issue for AGL.

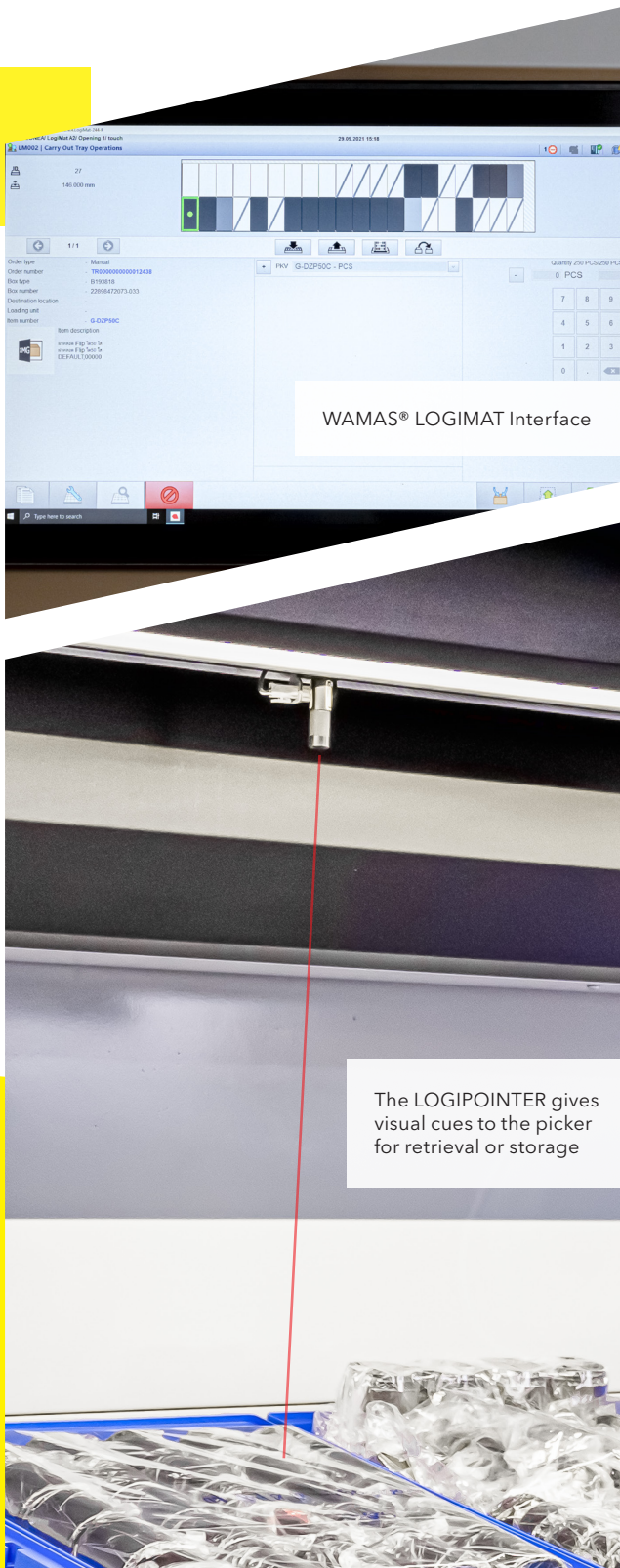


Free-standing 20 m SSI LOGIMAT® –
H 20 m x W 4.57 m x D 3.09 m

“With the SSI LOGIMAT® and Mezzanine solutions, Angel Beauty Supply warehouse is able to increase the storage density and optimize the material flow performance, all-in-one centralized facility. By introducing semi-automated system into the material flow process, we are now prepared to scale up our business operation and serve more customers in the future.”

Ms.Kwanjai Pitayanukul
Managing Director

An SSI LOGIMAT® Designed With Multiple Supplementary Options:



WAMAS® LOGIMAT Interface

The LOGIPOINTER gives visual cues to the picker for retrieval or storage

LOGIGATE – Safety and Optimum Management Control

To protect the stored goods against unauthorized access and soiling, AGL can simply create different user access and control for different user profiles to access different trays of inventory.

LOGIPOINTER – Visual Support via Optical Indication

Picking and packing from a 4 m tray size can be visually challenging, especially if there are multiple spots within the tray to pick from (or store). To increase the efficiency and facilitate the picking process, the picker works with the LOGIPOINTER, an optical indication that points to the correct storage location where the goods are placed on the tray. This enables the picker to quickly identify the items to pick out or store, resulting in minimal picking errors and improved efficiency.

LOGITILT – Tilted Tray Angle From 10 to 30 degrees, in One-Degree Intervals

To further boost productivity and work comfort, LOGITILT tilts the tray angle from 10 to 30 degrees, in one-degree intervals to improve the accessibility to the tray. The pickers no longer need to bend over the tray since all the goods are within an easy reach.



The LOGITILT option can be individually adjusted from 10° to 30° for each tray

Storage and Picking – All-in-One

The combination of bulky storage and small parts storage systems allowed AGL to creatively innovate without much hassle.



Cartons and totes storage - Average throughput of 191 order lines per day

Project Objectives

- Centralize warehouse distribution for better management
- Optimize warehouse activities performance with an innovative solution
- Increase storage capacity from 3,000 SKUs to 7,500 SKUs
- Improve picking accuracy and efficiency
- Integrate ergonomic design into storage and picking solutions



“AGL has the vision to bring innovation into packaging business. Together with SSI SCHAEFER’s unique product and software solutions, AGL is able to increase performance of warehouse activities, and enhance labor performance in process, picking accuracy in less time.”

Ms.Kwanjai Pitayanukul
Managing Director



1 600 6-tier mezzanine racking system for bulky goods storage

Facts and Figures

Scope of Supply and Services

System Key Figures

Warehouse area	1,500 m ²
Stock keeping units (SKUs)	Approx. 7,500
Activity peaks	Approx. 191 lines / day, 85,400 pieces / day
Working hours	8-10 hours / day
Shifts / day	1 shift

6-Tier Mezzanine System

Large-load storage system

Specification	25 x 20 x 16 m (L x W x H)
	Shelf depth: Frame 1200 mm , Frame 600 mm Shelf height: 2800 mm per floor Total bays: Frame Depth 1200 = 41 bays, Frame Depth 600 = 24 bays
Interlock 600 long-span shelving	
Storage locations	1,272 shelf compartments
Accessories & components	Goods elevator, staircase, wire mesh decking panel, mesh fencing, handrail, signboard, fascia

SSI LOGIMAT® Vertical Lift Modules

Storage and picking system

Units	2
Width	3.092 m
Depth	4.57 m
Height	20 m
Number of trays	92 per Vertical lift module

Options


LOGIGATE	Protects the stored goods against unauthorized access and soiling
LOGITILT	Tilting mechanism of the tray for ergonomic operation
LOGISTAINLESS	Stainless, corrosion resistant panelling of the access opening in chrome steel
LOGIPOINTER	Optical indication of the storage position through a laser pointer
17-inch TOUCH PANEL	Large, clearly structured touch surface for high operating comfort within the access opening
LOGICIRCLE	Warranty extension by additional 24 months
LOGIREMOTE	Remote access to increase availability

Reference:

<https://www.fortunebusinessinsights.com/cosmetic-packaging-market-102130>



Bulky goods stored on the I 600
6-tier mezzanine racking structure



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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