

Space Optimization

Pet Lovers Centre solves its space and efficiency challenges with Körber's shuttle-based storage solution



Snapshot

Company	Pet Lovers Centre
Industry	Retail
Number of Employees	409
Warehouse Size	25,000 Sq. Ft.
Körber Competency	Automation and Material Handling Equipment
Solution(s)	Shuttle-Based Pallet Storage and Systems Integration

Complexity

Meet demand during a period of rapid growth utilizing the limited warehouse space Pet Lovers Centre already owned

Best practice

Replace outdated, manual putaway and storage processes with a shuttle-based pallet storage system

A “ruff” warehousing challenge

As one of Singapore's oldest and largest pet supply and care retailers, Pet Lovers Centre knows the bond between consumers and their furry friends is unchanging. However, the way consumers purchase supplies to keep those four-legged friends happy and healthy has evolved dramatically since the business launched in 1979. As e-commerce directly challenged brick-and-mortar retailers in the early 2000s, more pet owners turned to the web to ship food and toys directly to their door. The shift to e-commerce also meant retailers needed to completely rethink how products are stored and shipped.

This rapid development of online sales channels, coupled with Pet Lovers Centre's already explosive growth, meant the supplier needed to seriously consider how it would support future operations. Pet Lovers Centre's main facility had run out of room, and with warehousing space at a premium in Singapore, expanding into a new building was a less desired option. In addition, the existing storage solution – a conventional selective racking system – significantly hindered efficiency. Because the system required

Increased throughput by

40%

2x

pallet storage capacity

safety risks reduced to

0



employees to walk between racks and collect items using electric reach trucks, it took up too much space. In addition, the system often led to damaged products.

With no room to grow horizontally, Pet Lovers Centre had to think vertically, as well as how best to leverage the warehouse's volume. It began investigating automated storage systems that would allow the warehouse to store more pallets, keep more product on hand and improve employee efficiency.

The “pet” project: improving putaway and storage with shuttle-based pallet storage

While researching potential automation solutions, the Pet Lovers Centre team discovered Körber's shuttle-based pallet storage system, designed to replace conventional racking systems with multi-deep automated storage to maximize warehouse space. Pet Lovers Centre visited Körber's design center in Portugal to discuss its needs and see the storage system in action. After determining the system could double the warehouse's storage capacity, Pet Lovers Centre settled on the automated solution.

Körber got to work immediately, custom-building a shuttle-based pallet storage solution that kept the facility's odd shape in mind. The high-density configuration included multiple units of Körber's latest wifi-controlled Autonomous Satellite Vehicles (ASVs), supported by two stacker cranes. In the proposed system, pallets would be transported to and from storage via a conveyor system, shifted to the ASV and stored in the multi-deep racking. The system would be capable of storing up to 12 pallets in a single, multi-deep lane. Körber quickly went to work building the system and completed the project earlier than planned.

As anticipated, the **Körber shuttle-based storage system was able to more than double Pet Lovers Centre's capacity, from 1,400 pallets to 2,833, and average throughput increased by 40%. Only two employees** are needed to operate the entire warehouse – as opposed to multiple employees required to just manually retrieve goods in the conventional racking system. The introduction of the shuttle-based pallet storage system has also greatly reduced the amount of time needed to train employees.

“Körber's shuttle-based pallet storage has helped us conquer our supply chain complexity.”

David Ng,
Chief Executive Officer
Pet Lovers Centre

Improved safety in multiple areas

The system has also improved operations from a food and employee safety perspective. The more products Pet Lovers Centre stores, the harder it is to keep track of which bags or cans of food will expire first. The shuttle-based pallet storage solution processes expiration data quickly, ensuring no goods are allowed to grow old on the racks. In addition, the system includes a profile and weight check station at the input conveyor to ensure no pallets that are out of dimension or overweight will be stored in the racking. The station improves safety of product handling and reduces the chance of damage to the pallet and/or product. Plus, as employees no longer need to walk between the racks, Pet Lovers Centre virtually eliminated the risk of injury.

Pet Lovers Center conquers complexity

From the planning phases to go-live, Pet Lovers Centre was pleased with all aspects of system installation. Körber's team of engineers were equipped with strong technical know-how, ensuring they could design a system that met Pet Lovers Centre's unique needs. The project team laid out an in-depth implementation schedule that kept the retailer informed at every step of the process. Ultimately, adopting the best practice of shuttle-based pallet storage enabled Pet Lovers Centre to meet the evolving demands of an increasingly digital customer base.

“Körber's multi-deep storage enabled exceptional space utilization. We've doubled our pallet storage capacity and increased throughput by 40%,” said David Ng, Chief Executive Officer at Pet Lovers Centre. “Körber's shuttle-based pallet storage has helped us conquer our supply chain complexity.”

