

Case study: Tamer

Multi-solution grows business in Saudi Arabia

Location: Saudi Arabia



Mecalux has equipped a 32,600 m² warehouse, in collaboration with Alshaya, for Tamer which is a logistics operator in Jeddah (Saudi Arabia). The project includes pallet racks, the high-density Pallet Shuttle system, push-back racks and an underpass set up for picking from live channels. Overall, the systems yield a 22,706-pallet storage capacity. This warehouse comprises multiple solutions to manage more than 200 different SKUs, to facilitate 700 inflowing pallets per day and to streamline order picking of around 440 orders/day.

About Tamer

Founded in 1922, Tamer is one of the biggest logistics operators in Saudi Arabia. It works for customers in the health care, beauty and consumer goods manufacturing sectors. Tamer's business activity consists of importing, storing and distributing products. Additionally, it designs marketing and promo campaigns for customers. Besides doing business in Saudi Arabia, it is able to distribute products in other countries thanks to agreements and collaborations with international logistics operators.

More than 200 SKUs in 32,600 m²

The company keeps growing and, as time

goes by, it has become the first choice for many companies that require logistics services in Saudi Arabia.

Tamer's key to success has been investing in storage. It was self-evident to the company's directors that the business would have to improve its storage and distributions processes at a steady pace to meet its customers' demands.

Dealing with its expanding business is a priority. So, the company just commissioned a new 32,600 m² logistics centre meant to house its customers' products (mainly, perishable consumer goods).

Tamer had to install a storage system to make the most of this surface area, one that would provide good space proposing to obtain a higher overall capacity. According to Samer Sabri, executive manager at Tamer, *"Our top priority was to have a well-designed warehouse, one ready to manage more than 200 SKUs we work with and one that would let us distribute 440 orders a day."*

One of the major difficulties this logistics operator runs into is how to store multiple product from different customers, each with different sizes, features and demand levels. In light of this situation, Mecalux, in conjunction with Alshaya, proposed the installation of four storage systems and that each system be allocated to certain SKUs and/or to specific operations:

- Pallet racks
- High-density Pallet Shuttle system
- Push-back racks
- Live channels for picking

"We assessed the user-friendliness of these solutions when it came to handling products in our facility", explained the executive manager. Streamlined management of the merchandise is vital in order to handle 700 incoming pallets from customers located at different points in Saudi Arabia and, likewise, the dispatch of another 800 pallets.



Pallet racks

Single and double-deep racks were installed throughout almost the entire warehouse. They measure 10 m high, divided into six levels, and allowing storage space for 13,980 pallets.

They provide direct access to products, which equates to faster merchandise management, as well as quicker insertion and extraction of pallets from their locations.

The double-depth racks feature two pallets of the same SKU in each location (one behind the other). Here is where top rotation products are housed, such as higher demand food goods and those with upcoming expiry dates.

The storage levels of the pallet racks can adjust to the features and sizes of the more than 200 SKUs that Tamer manages

Pallet Shuttle system

The warehouse includes four blocks of racks with the semi-automatic Pallet Shuttle system. The blocks are 11 m high, with five shelf levels each, and run 14 m long in channels where up to 13 pallets are slotted. This system eliminates the number of aisles, making full use of available space to equip the company with a 6,350-pallet capacity.



An aisle lines each side of each block of racks. The goods can be managed as per the FIFO principle (i.e., insert the pallets through one aisle and extract them from the opposite aisle) or the LIFO method (insert and extract pallets from the same aisle), depending on Tamer's logistical requirements.

"With this solution, not only have we gotten more spots to store our goods, but we also run faster overall operations, since workers do not need to enter storage lanes with a forklift", points out Samer Sabri.

Samer Sabri Executive Manager at Tamer

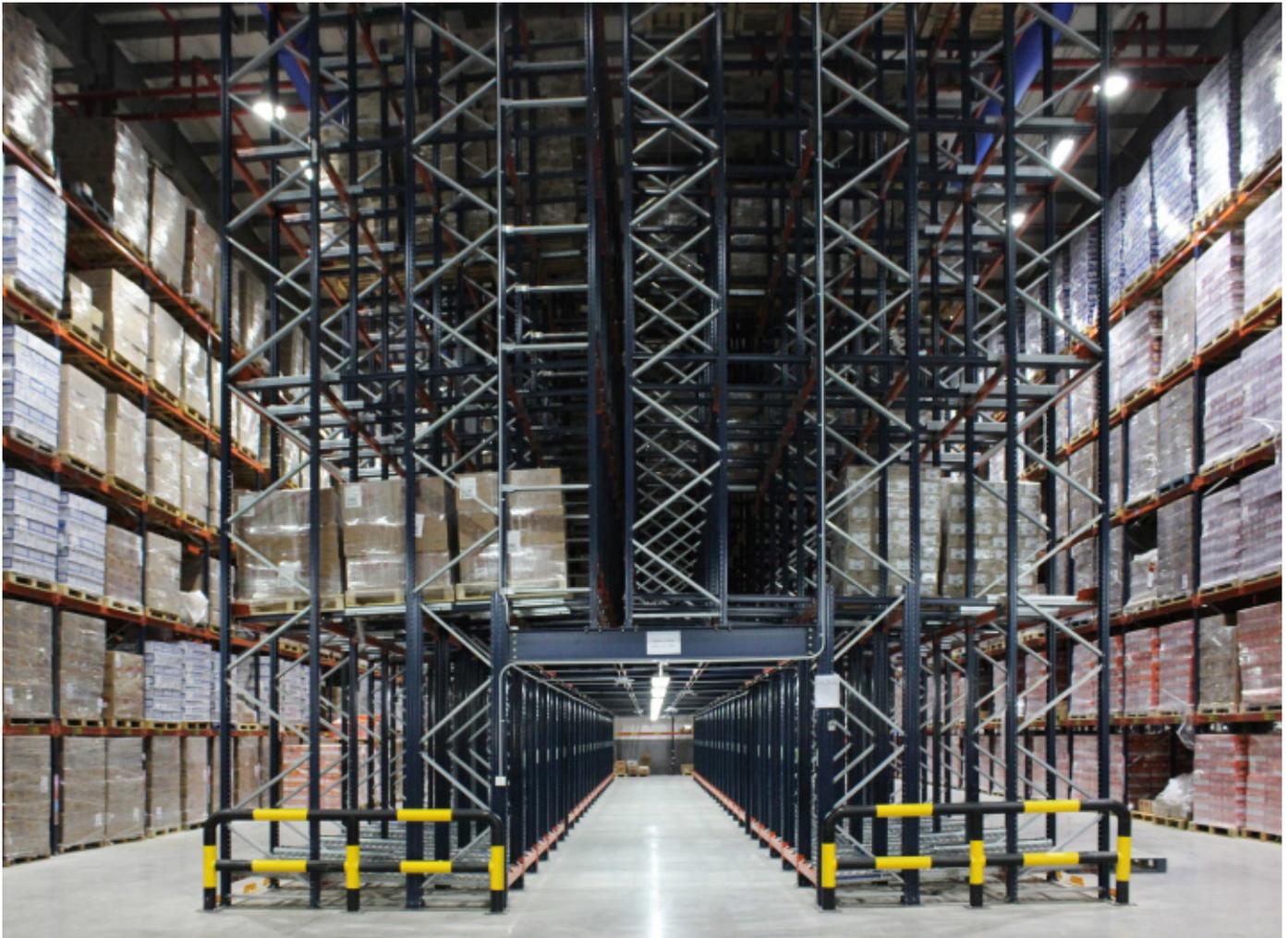
"When we went to fit out our warehouse, we knew right away that we wanted to work with Mecalux because of the high-quality products it offers. The installation has been moulded to our way of doing business and to our logistics, by providing us with order fulfilment capacity and speed."

Among high-density systems, the Pallet Shuttle is the one that yields more speed in organising loads. Workers deposit the Pallet Shuttle in the corresponding channel. Soon afterward, they insert the goods into the first position in the channel and the motorised shuttle takes the items directly up to the first open location it finds inside the channel.

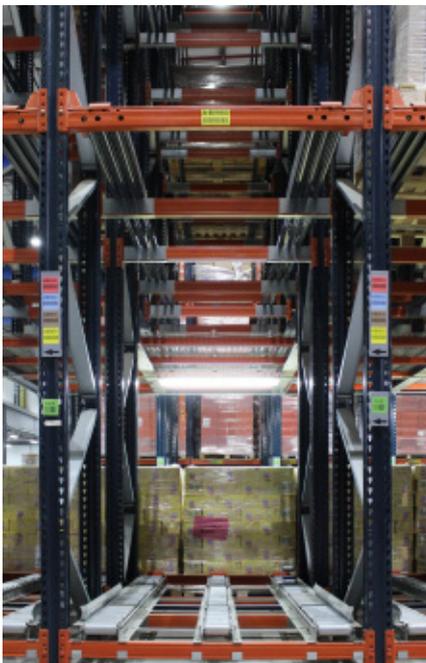
Initially, Mecalux supplied Tamer with a total of five Pallet Shuttles. Later on, this figure jumped to 12 shuttle units. The company has multiplied its pallet movements by having more shuttles in service.

Operators use a tablet with an internet connection to interact with the shuttles and organise the introduction and extraction of the pallets





Operators go around the picking underpass collecting products needed to fulfil each order. Operators follow the order grouping method, which consists of preparing several orders during the same trip



Picking solutions: push-back and live channels

Each day the installation puts together 440 orders, each of which comprises around 21 product lines. A specific zone was designed for order fulfilment to facilitate work by operators.

Mecalux has installed ten blocks of push-back racks. And below it has set up a picking passageway where workers collect SKUs meant for each order, picking items directly off pallets located in the live storage channels.

Reserve products are deposited in the push-back racks of the pick tunnel. As they are slightly inclined, this ensures and speeds up replenishment tasks. In this system, the pallets are inserted into each channel and are pushed along by forklifts, which assist the manoeuvre.

In terms of the picking tunnelway, it is filled with live channels for picking on each side. Pallets are placed into the loading aisle and, since it is inclined, these unit loads slide via gravity to the opposite end, which faces the pick tunnel. The advantage is reserve palletised stock stays stored in the same channel, which is why the company always has the products it needs for pick tasks.

One warehouse, four solutions

By combining multiple systems, the company can avail itself of the conveniences each solution brings its business.

Ultimately, the company has pooled the versatility and accessibility that pallet racks offer with the compactness and speed of the Pallet Shuttle system, while also speeding up order picking thanks a zone specifically set up for this work (with push-back racks and a pick tunnel on the lower level).



Advantages for Tamer

- **Prep of 440 orders a day:** a specific warehousing zone was set up in the facility to fulfil orders, each order being an average 21 lines long.
- **Operational agility:** the warehouse stands out for being pick-friendly and for receiving 700 pallets and shipping out another 800 pallets each day.
- **High-density storage:** Mecalux systems make maximum use of space to provide storage slots for 22,706 pallets.



Technical data

Storage capacity	22,706 pallets
Pallet size	1,000 x 1,200 mm
Max. pallet weight	1,000 kg
Racking height	11 m

