



AR SHUTTLE

SEMI-AUTOMATED SOLUTION
FOR HIGH-DENSITY PALLET
STORAGE

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A SEMI-AUTOMATED SOLUTION FOR HIGH-DENSITY PALLET STORAGE

AR SHUTTLE is a compact semi-automated pallet storage solution using self-powered shuttle carts which operate independently to move the pallets in the rack.

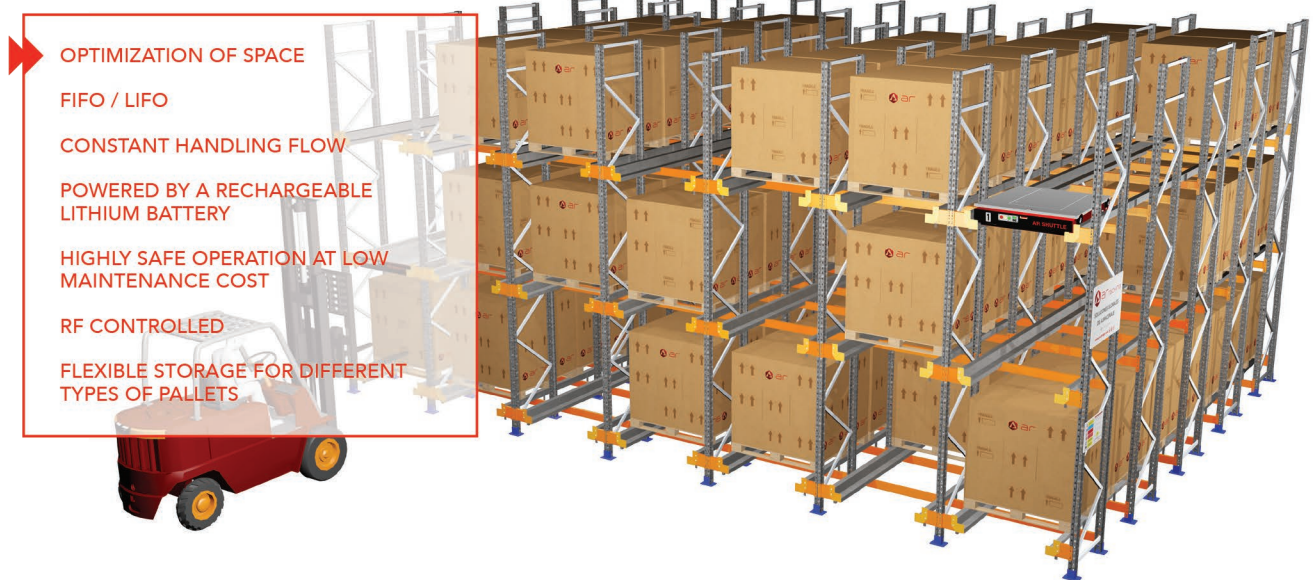
Main advantages include:

The AR SHUTTLE system enables you to maximize floor space and height available by minimizing the operating aisles needed for trucks.

Since forklift operators do not have to enter the aisles, maximum safety is guaranteed when handling pallets, avoiding collisions in the rack structure. This reduces maintenance costs as well as the number of issues from handling loads.

The AR SHUTTLE system allows for automatic control of inventory by using sensors to count the number of pallets stored. Remote control and bar codes help better control the stock, drastically decreasing error margins.

With the AR SHUTTLE system, stored pallets can be loaded and unloaded as FIFO or LIFO, even in freezing chambers up to -30°C.



HOW DOES IT WORK?

Designed for high-turnover storage, this solution enables automatically loading and retrieving pallets continuously by using a remote controlled system. Unit loads are either placed on the first available location until the rack is fully loaded, or retrieved from their storage locations and moved to the front ready to be picked by a forklift truck, until the rack is fully unloaded.

- AR SHUTTLE is positioned in the lane required with a fork lift truck. The pallets are stocked one by one by the fork lift truck at the beginning of the lane.
- AR SHUTTLE lifts up the platform and moves it along the channel until it reaches the first free position, where it puts the pallets. Then, it comes back to the beginning of the lane ready for the next drive cycle.
- Before putting the last pallets into the lane, AR SHUTTLE must be removed and put in a new lane.



REMOTE CONTROL:

- Each remote control unit can control up to 4 AR SHUTTLES.
- Pallet count command.
- Onscreen messages for machine maintenance.

AR SHUTTLE IS SUITABLE FOR:

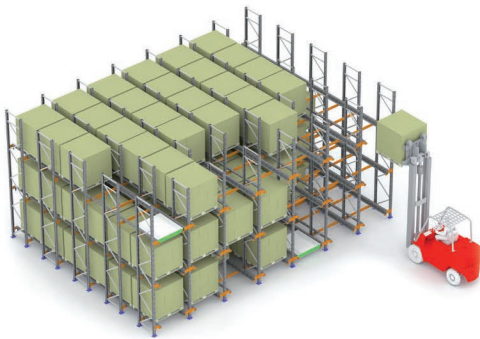
- ▶ Warehouses for finished product / semi-finished / raw materials (homogeneous products)
- ▶ Buffer for shipping (ready loads)
- ▶ Buffer interpretational (decoupling between different manufacturing process)
- ▶ Buffer for process (Temporary parking of products before their end machining/ finishing)

The pallets can be stored and retrieved according to two different storage orders:

LIFO (Last-in-First-out)

This is the most common system, where the pallets are put in and taken off from the same side.

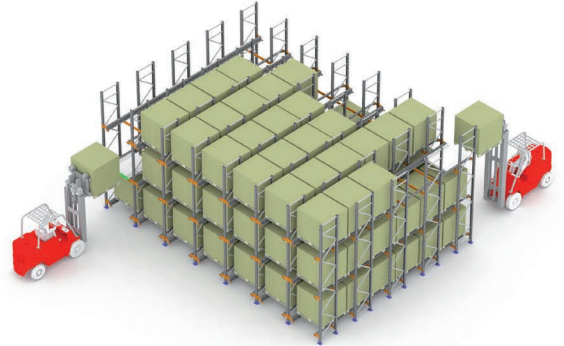
The lanes should be completely emptied before putting in a new load.



FIFO (First-in-First-out)

This system is ideal for buffering units or transit warehouses, where incoming and outgoing operations are performed from opposite sides.

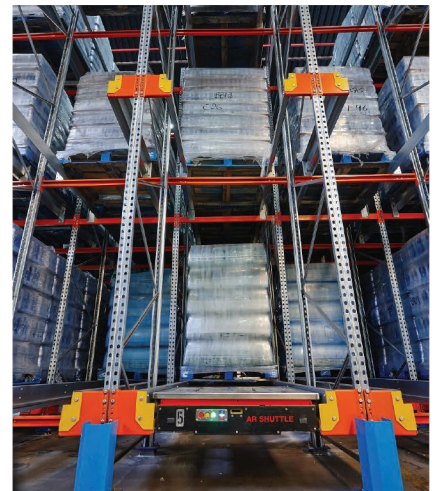
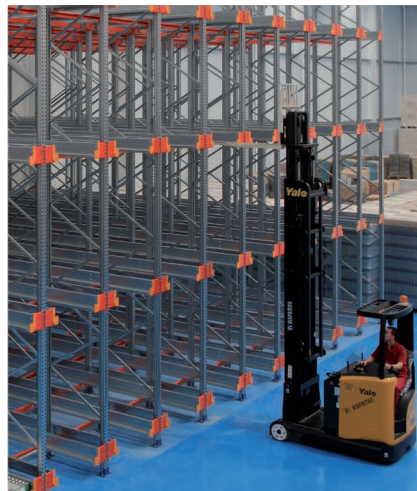
When the lane is not completely emptied, FAST relocates the pallets by bringing them closer to the exit position, allowing new loads to be placed on the rack.



Depending on the required functions, AR SHUTTLE will be equipped with the following elements:

STANDARD FEATURES	STANDARD EQUIPMENT
Single Deposit	On board lithium battery
Auto Deposit	Battery charger
Single Retrieve	Remote control + charger
Auto Retrieve	User manual
Auto Retrieve by quantity	
LIFO Shuttle	
FIFO Shuttle	
Stock counter	

OPTIONAL EQUIPMENT
Multi pallets
Spare parts
Freezer version





AR SHUTTLE



AR DRIVE IN



AR LS (LONGSPAN)



MULTI TIER



AUTOMATED WAREHOUSE



AR MOBILE



LIVE STORAGE



MEZZANINES



AR PAL

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