



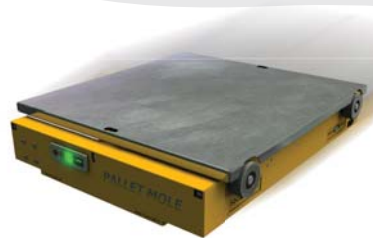
## ***PALLET MOLE***



*With the latest technology in compact, high density vertical storage, the Pallet Mole maximizes the use of floor area and warehouse capacity.*



Storage Management Systems Pty (Ltd)



## ADVANTAGES OF USING THE PALLET MOLE :

- Lower cost per pallet stored compared to other high density storage methods.
- Batch FIFO or LIFO operation is possible.
- Less product damage.
- More SKU's can be stored compared to Block Stack storage.
- Planning flexibility: the Pallet Mole can be configured to handle a variety of sizes and types of loads whilst also having the ability to store different types of goods on different levels and in different tunnels.

## Operational Features: Patented Pallet Count System:

Stock taking in high density storage systems has always been an arduous and time consuming process. Storage Management Systems has identified the need for a solution and have subsequently developed a "Pallet Count" function. With the help of Pallet Mole, Stock-taking is now made quick and simple. "Pallet Mole" is simply placed into the specific lane where pallet quantity needs to be verified. The "Stock Count" function is selected on the RF Controller Unit. The Pallet Mole unit counts the quantity of pallets in the specific lane and sends the information back to the RF Controller unit. Fast, accurate and easy.

### **Pallet Mole Recovery Mode:**

In the event of a "Pallet Mole" being "stuck" inside the racking lane, the immobile "Pallet Mole" unit can be retrieved by means of sending a second, "recovery" Pallet Mole unit into the same lane. It is thus no longer necessary for the unsafe operation where warehouse personnel need to climb into the racking lane in order to retrieve a unit that has become immobilised.



With the latest technology in compact, high density vertical storage, the Pallet Mole maximizes the use of floor area and warehouse capacity.

Often production facilities need to store pallets of goods in the most compact way possible. The goal is usually to maximize the use of floor space; and in the case of cold storage, the more compact the goods are stacked, the better the efficiency and ease of temperature control.

SMS has developed an innovative, new, high density storage system to meet these storage demands. Our new product, Pallet Mole, enables "aisle free" racking to provide a much higher density of storage than Drive-in racking, Double deep storage and conventional VNA storage.

## HOW THE PALLET MOLE WORKS:

Powered by on-board rechargeable batteries, the Pallet Mole is driven on rails, into a specially designed racking system of tunnels. Using the lifting platform and positioning sensors, each load is then transported to the furthest available storage location in the tunnel. Storage and retrieval are both conveniently operated by the forklift truck driver using a remote control.



## “Battery Low” Fail Safe Function

The “Pallet Mole” continuously monitors the battery charge level. On detecting a “Battery low” level the “Pallet Mole” will execute the last operation it was busy with and return to the Home position, giving a “Charge” indication as well as sounding a audible alarm. The unit will not perform another operation until it has been charged.

## “Pallet Shuffle” Function

As pallets are removed out of a racking lane in a FIFO operation, additional storage capacity can be created by employing the “Pallet Shuffle” function on the RF Controller. The Pallet Mole automatically moves all the relevant remaining pallets in a tunnel to the foremost position of the specific lane, thus creating additional storage capacity at the “In-Loading” side.



### LIFO

“Last-In-First-Out”

pallets are placed into storage and retrieved from storage from the same pick face or side



Technical Detail	Unit	Characteristics
<b>Remote Control</b>		
Type		Radio Transmitter 898 MHz, 900 MHz
Charger Power Supply	V	100 - 240 Input AC 1.45 - 14.5 Output DC
RF Controller	V	4.8
Battery Pack		
<b>Battery Charger</b>		
Charger Output	V	27 VDC
Power Supply	V	100 - 240 VAC
<b>Pallet Mole Unit</b>		
Power Unit		Electrical /Battery
Speed Control		AC Invertor
Supply Voltage	V	24 DC
Operational Voltage	V	Variable AC + Regen
Rated Capacity	Kg	1500
Pallet size	mm	1200 x 1000 1200 x 800 1500 x 1200
Travel Speed	M/min	50
Drive Motor	kW	0.55
Lift Motor	kW	0.55



### FIFO

“First-In-First-Out”

Pallets are placed into storage from the back of the racking lane and retrieved from storage from the front pick face or side.



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## Pallet Mole Dimensions

### 1500 x 1200 (Jumbo)

Lift Height	mm	50
Chassis, Height	mm	196
Chassis, Length	mm	1360
Chassis, Width	mm	1180

### 1200 x 1000 (Standard)

Lift Height	mm	50
Chassis, Height	mm	196
Chassis, Length	mm	1160
Chassis, Width	mm	880

### 1200 x 800 (Euro)

Lift Height	mm	50
Chassis, Height	mm	196
Chassis, Length	mm	960
Chassis, Width	mm	880

Batteries	Standard Application	Freezer Application
Battery Type	Acid Gel	AGM
Battery Quantity	4	2
Battery Capacity	100A/Hr	70A/Hr
Charging Time	Min 8 Hrs	Min 7 Hrs

\*Special sizes on request

## Other Features:

- AC Regenerative Braking Control – Ensuring reduced operating & maintenance cost together with enhanced battery efficiency.
- Electro-Mechanical Lifting & Traction System
- “Quick Change” Batteries

Bi-directional RF control unit with:

- Mole battery low indication
- Mole selected indication
- Mole error feedback
- Manual override function
- “Pallet Count” Function



Storage Management Systems Pty (Ltd)

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\*Technical specifications subject to change