



# Radioshuttle™

We convert space  
into business.



## What's in it for you?

### 1 Productivity

While Radioshuttle™ moves the pallet through the racking, the operator is free to do other work.

### 2 Maximize storage utilization

Maximize available warehouse space usage of the full height of your warehouse building.

### 3 Maintain optimal selectivity

To select loads at each level and section is managed independently of the other levels and sections.

### 4 Cost effective

More pallet locations in existing warehouse minimize use of external storage of pallets. 50% of the movements are done by Radioshuttle™.

### 5 Minimize damage

Less damage to goods since the internal movement of pallets is done by Radioshuttle™.

### 6 Efficient movement of goods

Your existing fleet of trucks and drivers can move more products because the Radioshuttle™ will do the movements of pallets.

### 7 Highly customizable

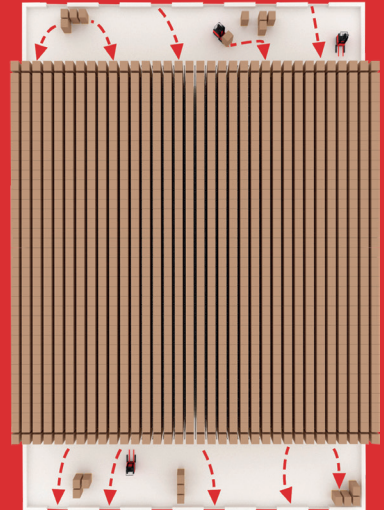
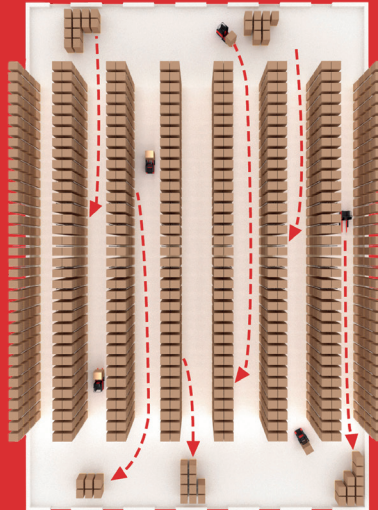
Both the racking and the shuttle is having multiple functions and parameters that can be adjusted to handle different carriers and loads in the most efficient way. Every single project is customer defined by the need and wishes from the customer.



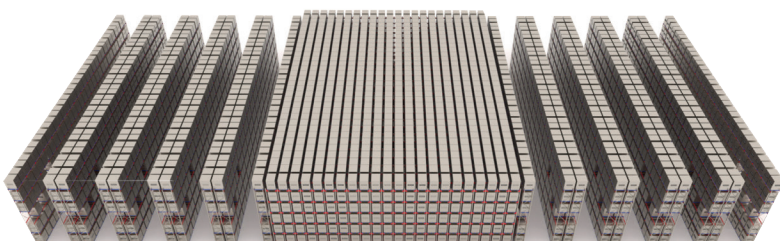
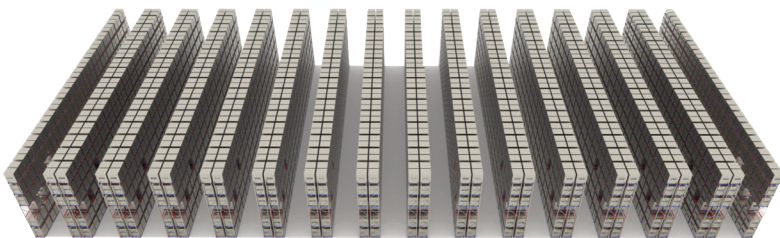
# SAVE SPACE

## Move pallets faster

In a typical warehouse, drivers are moving pallets half way into and out of the facility. Radioshuttle™ cuts this distance down dramatically - moving pallets at over twice the speed of conventional rack.

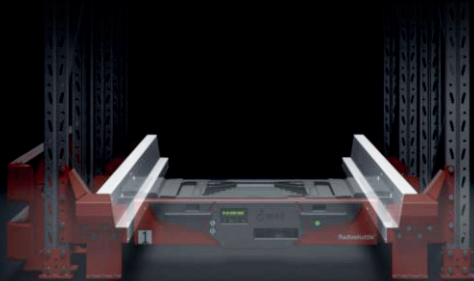


## Store more pallets



Storing your high inventory items in rack designed for low inventory items wastes space. In the area Radioshuttle™ is deployed - pallet storage capacity is doubled.

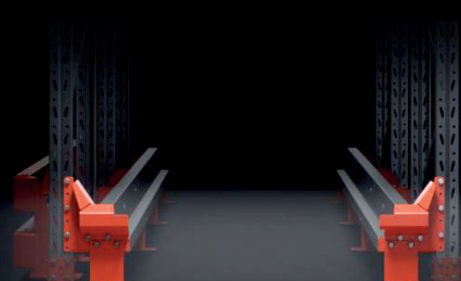
# STRUCTURE



## RAIL

Our patented Radioshuttle™ rail has a wide top opening. This allows the operator to place the shuttle into the structure quickly and easily!

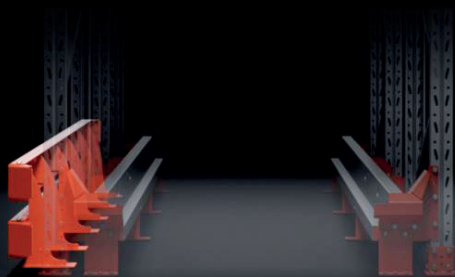
The combination of our high strength rail and Radioshuttle's poly wheels will result in a structure that lasts for decades.



## ENTRY GUIDE

The guide rail serves several functions:

- > Aiding the operator in loading the shuttle into the structure.
- > Guiding pallets into the first position – both vertically and horizontal.
- > Protecting the rail with several deflection plates.



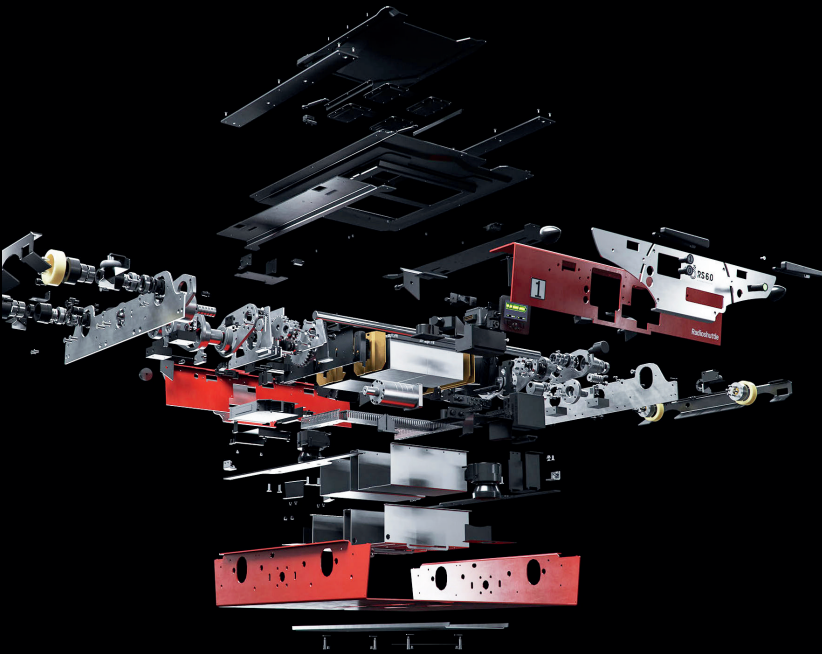
## FRAME PROTECTION

For outer frame uprights and truck aisles we provide:

- > Machine protection netting to keep people clear of any storage lanes for continued safe operation.
- > Aisle upright protection to protect the entire structure from any accidental bumps during travel along aisles adjacent to the system.



# SHUTTLE



## Fully automated

RS 6.0 works with more than 200 different approved pallet configurations. Pallets up to 1.800 kg can be handle by the shuttle.

RS 6.0 is prepared for Industry 4.0, WiFi, RFID, and WMS.

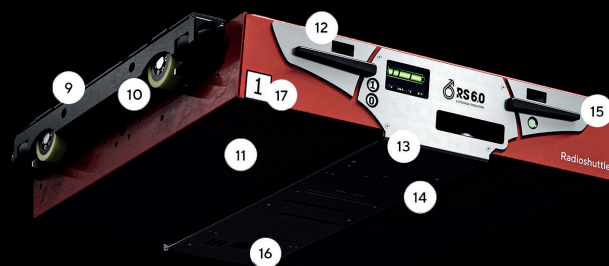
Ability to read RFID tags. Tags are used to identify every channel and shuttle placement in the warehouse. Must be combined together with WiFi solutions.



## Components

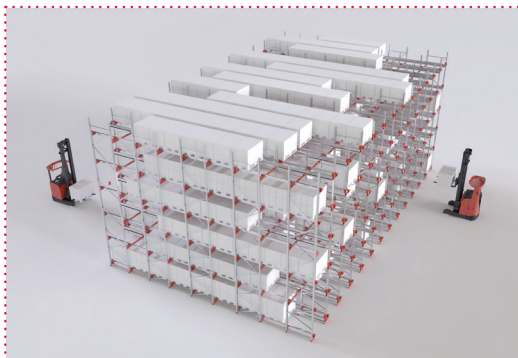
Each shuttle is equipped with features like warning lights, audio signals, bright and clear display systems, etc. This is the result of 30 years of evolution and continuous improvement.

- 01. Side guidance
- 02. Sweeper arm
- 03. Bumper
- 04. Battery compartment
- 05. Communication information display
- 06. Pedestrian safety scanner
- 07. Upward sensor
- 08. Status lamp
- 09. Side sensor
- 10. Wheel
- 11. Grip surface
- 12. Forward sensor
- 13. Directional travel lights
- 14. LED light beam
- 15. Fork bumper
- 16. RFID reader
- 17. Inclination sensor
- 18. Remote control
- 19. Radioshuttle™ Connect (add on)



# APPLICATIONS

## Radioshuttle™ configurations – it's your choice!



### FIFO – First in first out

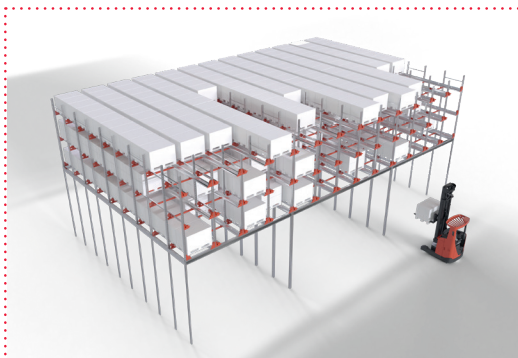
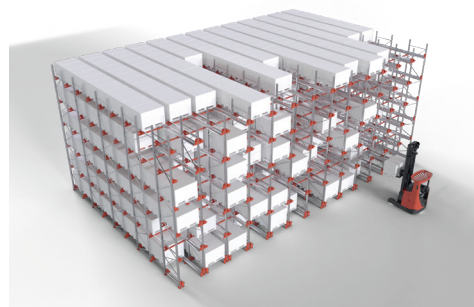
Use the Radioshuttle™ in your facility as a means to store date critical items that require the first pallets in to be the first pallets out.

Amazingly, use your Radioshuttle™ to carry out a reorganization of your pallets, and when required, move all pallets closer to the unloading point.

### FILO – First in last out

For SKU's that can be treated one group per lane, pallet handling will take place in the main aisle. This means that the rack can be made much deeper than ordinary high density racking systems.

Furthermore, the forklift doesn't need to stand and wait for the Radioshuttle™, it's free to work elsewhere. This produces a high rate of turnover while halving the truck's handling time. As the Radioshuttle™ works on levels, the goods only need to be uniform within one level of the section. This means a high rate of capacity utilization and a high rate of accessibility.



### Mezzanine for staging

Radioshuttle™ system, in combination with a structural mezzanine, will benefit your facility in many ways.

Open space for staging of product is created at ground level with buffer storage just on top of it - without sacrificing selectivity of goods.

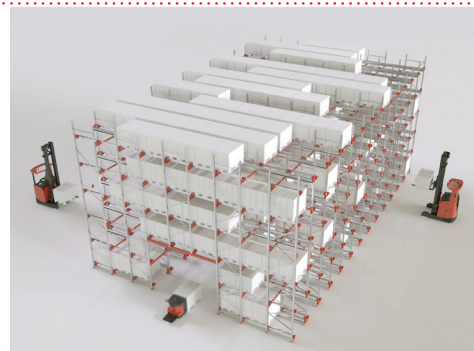
This solution will maximize usage of your existing available warehouse space. Loading of trucks will be optimized, resulting in less overall transport time.

### Pick tunnel

The Radioshuttle™ system easily combines with a dynamic pallet flow case pick tunnel.

Used in combination, replenishment pallets are stored at upper levels to feed pallet flow pick lanes at lower levels. All case picking takes place from within a picking tunnel that passes through the rack at ground level.

The buffer pallets are handled by trucks and the Radioshuttle™ in a separate truck corridor: An efficient and space saving way of storing pallets in the immediate vicinity of picking, and at the same time achieving a safe pick aisle.



# OPTIONS

## PARKING STATION

Radioshuttle™ parking station is designed to accommodate the Radioshuttle™ when it's not in operation, and when the user wants to move them away from the system. For example in warehouses that operate only 16 hours/day.

Radioshuttle™ can be parked in the rack and also charged without removing the batteries.



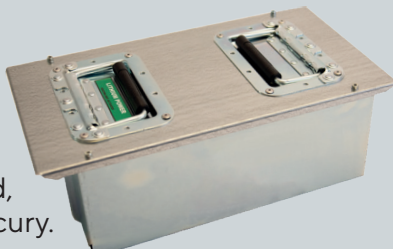
## CHARGING STATION

Fast, easy and controlled charging of batteries. Charging station for Radioshuttle™ gives the opportunity to keep good order on the charging of batteries. In each charging station there is space for 2 sets of batteries (4 pcs of battery cassettes). The battery cassettes are placed in an extensible drawer equipped with automatic coupling. When the drawer is closed the charging starts automatically. On the front there is a display clearly showing the charging status.



## LITHIUM BATTERY


- 40 % lighter than the lead acid-gel .
- 100 % longer run time on every charging cycle, compared to standard lead acid.
- 3 times longer lifetime than the standard lead acid.
- Charges 50% faster than standard lead acid.
- Life cycle cost, is 25% lower than standard lead acid.
- The battery can be charged directly even though it comes from a freezer environment.
- The battery contains no heavy metals such as lead, cadmium and mercury.



## WORK PLATFORM

If the unexpected occurs, the work platform will safely take you to the situation.





-30° to +40° C  
Radioshuttle™ works in  
all temperature zones

# An evolution in efficient warehouse management

**Fast** - The fastest system on the market.

**Safe** - All safety components are based on SS-EN ISO 13849-1:2016

**Intelligent** - High quality components and latest technology gives more flexible handling of different load carriers, Prepared for Industry 4.0, WiFi, RFID, and WMS.

**Robust** - Radioshuttle™ can operate in all temperature zones, from freeze to warm environments. Can handle pallets up to 1800 kg.

**Flexible** - Works with almost all kind of pallet types.

**User-friendly HMI** - Improved Human Machine Interface.

**Proven!** - Continuous development for 30 years, experiences from over 1.500 installations worldwide!

We reserve the right to correct any errors, inaccuracies, or omissions and to change or update the information in this folder at any time, without prior notice.



# Radioshuttle™

[www.radioshuttle.eu](http://www.radioshuttle.eu)

Radioshuttle™ video:

