
Radioshuttle™
RS 6.0
Radioshuttle™
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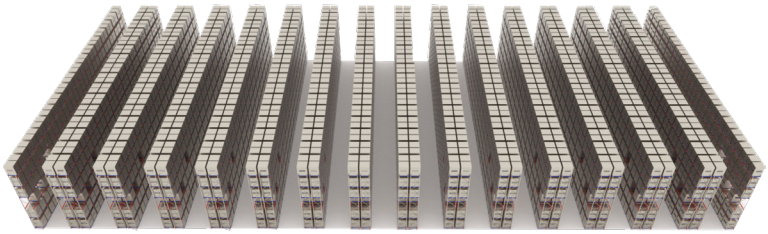
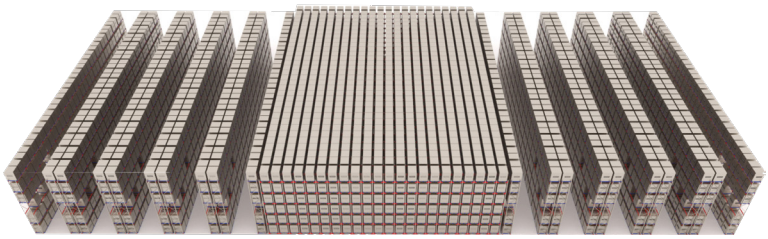
We convert space
into business.

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.

What's in it for you?

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

→ **Maximize storage utilization**
Maximize available warehouse space usage of the full height of your warehouse building.

→ **Maintain optimal selectivity**
To select loads at each level and section is managed independently of the other levels and sections.

→ **Cost effective**
More pallet locations in exiting warehouse minimize use of external storage of pallets. 50% of the move ments are done by Radioshuttle™.

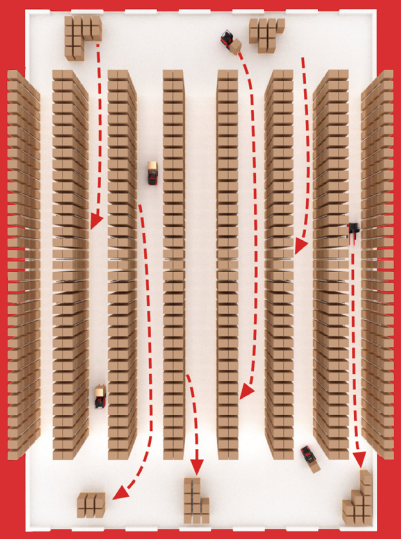
→ **Minimize damage**
Less damage to goods since the internal movement of pallets is done by Radioshuttle™.

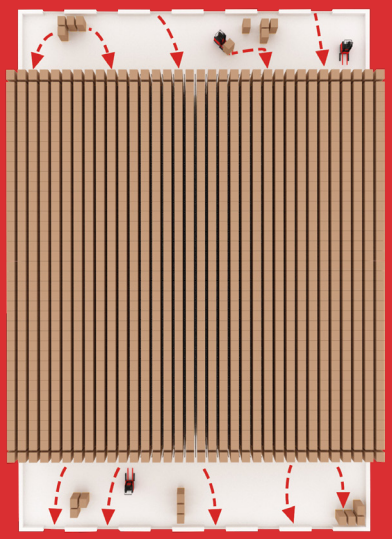
→ **Efficient movement of goods**
Your existing fleet of trucks and drivers can move more products because the Radioshuttle™ will do the movements of pallets.

→ **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.

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.





Sustainable future

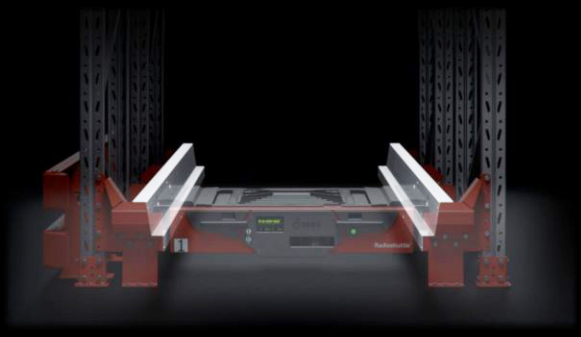
We are taking another step toward a more sustainable future by delivering machine chassis made of emission-free SSAB Zero™ steel, further minimizing our climate footprint.

The Radioshuttle™ system is created with sustainability overtones, optimizing customers' storage space and reducing energy consumption—a benefit especially important for cold and freezer warehouses. It also improves the working environment where it is used.

By incorporating emission-free SSAB Zero™ steel for the machine's chassis, we are pushing sustainable development forward. Thus, it has both a concrete and a symbolic value in our intention to take the steel into the future with the goal of zero in terms of carbon footprint.

SSAB Zero™ is a fossil carbon emission-free steel based on recycled steel and produced using fossil-free energy, without carbon emission offsetting and mass balancing allocation of emission reductions.

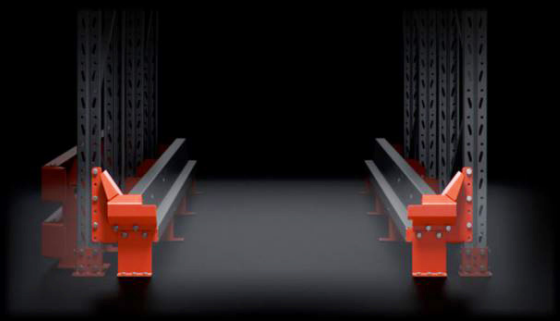
STRUCTURE



RAIL

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

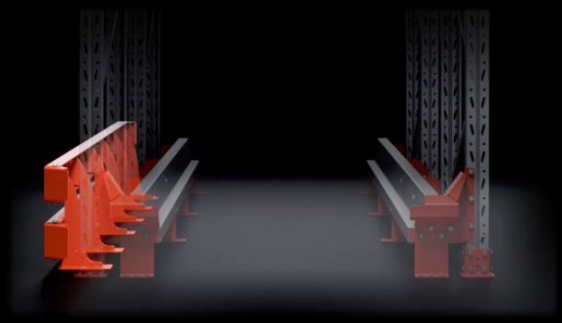
The combination of our high strength rail and Radioshuttle's poly wheels will result in a structure that lasts for decades.



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.

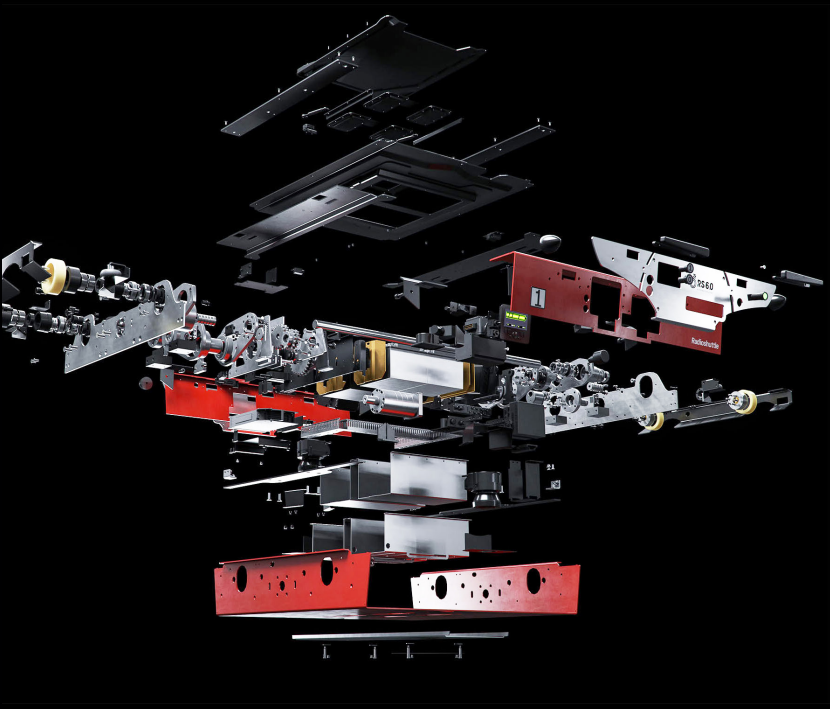


FRAME PROTECTION

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.

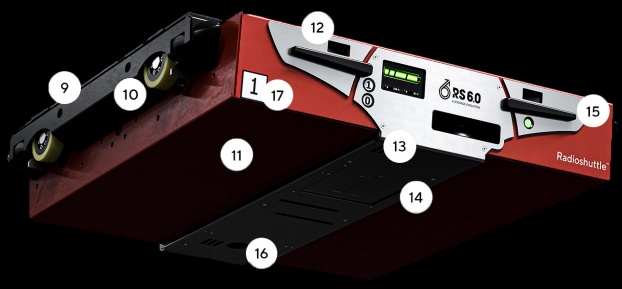
RS 6.0 is prepared for Industry 4.0, WiFi, RFID, and WMS.

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

Components

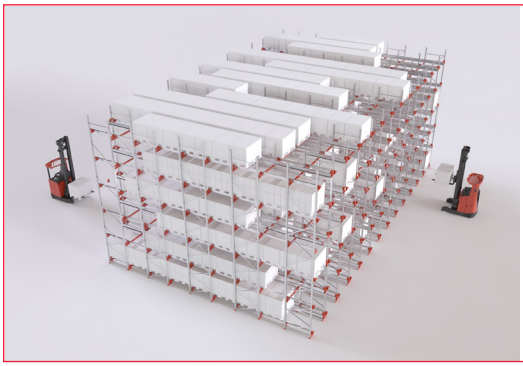
Each shuttle is equipped with features like warning lights, audio signals, bright and clear display systems, etc. This is the result of 30 years of evolution and continuous improvement.

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!



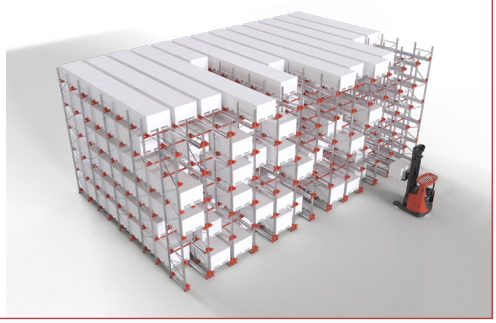
FIFO – First in first out

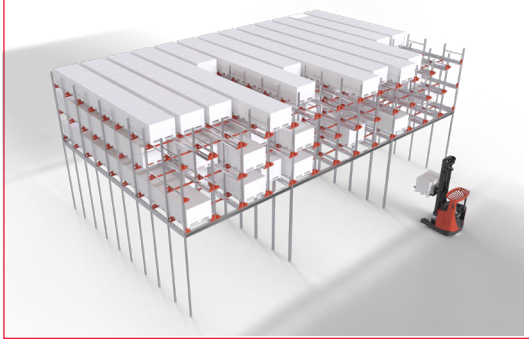
Use the Radioshuttle™ in your facility as a means to store date critical items that require the first pallets in to be the first pallets out.

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 Radios-huttle™, 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.



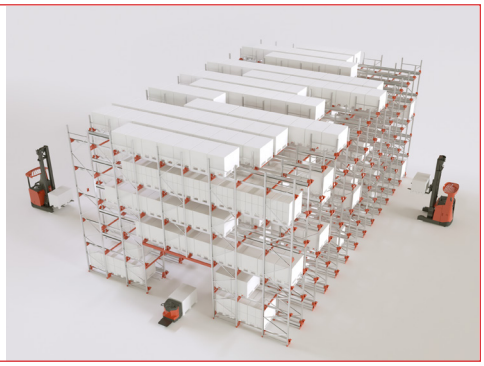


Mezzanine for staging

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 a 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.

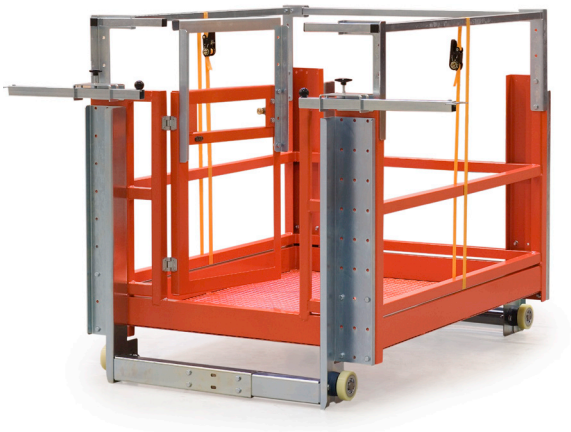
→ Life cycle cost, is 25% lower than standard lead acid.

→ 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 occur, the work platform will safely take you to the situation.



An evolution in efficient warehouse management

Fast
The fastest system on the market.

Safe
The Radioshuttle™ system complies with the EN ISO 13849-1:2023.

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

Flexible
Works with almost all kind of pallet types.

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

User-friendly HMI
Improved Human Machine Interface.

Proven!
Continuos development for 30 years, experiences from over 1.500 installations worldwide!

Reference case

Fully automated production facility with zero-defect vision

Gundlach Automotive Solutions Sweden in Gothenburg is the most advanced wheel assembly plant in Scandinavia and an example of what the future of the manufacturing industry might look like. Quality, efficiency, reliability, and sustainability go hand in hand with a vision of zero-defect production.

When operating a factory that maintains a good pace and a consistently high-quality level, a reliable automation is vital in all processes. That's why Gundlach chose to implement the Radioshuttle™ system.

Read more about the fully automated production facility in Gothenburg! Scan the QR code to go directly to the article.

Radioshuttle™

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