

A Member of the Constructor Group



MOBILE PALLET RACKING - MOVO

The ultimate storage solution





Keep your warehouse moving



More information see:
www.constructor-storage.com/MOVO

Mobile Racking - the sensible choice

Constructor's Mobile Racking system (MOVO) is the ultimate solution for high density storage of all pallet sizes or goods that need to be stored. The design eliminates the need for multiple picking aisles which significantly reduces the storage area required, or alternatively doubles the storage capacity in the same size area.

MOVO comprises of conventional pallet or cantilever racking mounted on steel framed trolleys which run on imbedded rails in the floor. A range of rails, bases and control systems are available to provide the best possible fit for your warehouse. A control unit operates the MOVO, and numerous standard safety features complete the solution. This package of features ensures easy operation and absolute safety at all times.

Each MOVO is custom made so it can be tailored to your individual needs and available warehouse space, offering the ultimate in storage design.

- ✓ **High density storage which requires only one truck aisle**
- ✓ **Full access to all pallet locations**
- ✓ **Can accommodate various pallet sizes**
- ✓ **Suitable for cold store; reduces running costs by minimising the to chill**
- ✓ **Operating temperature -30C to +40C**
- ✓ **Can be integrated to WMS**
- ✓ **Can be operated remotely with additional control units**
- ✓ **Increase your storage capacity by up to 100% or reduce your storage footprint**



Best. Nr.	Appl. Nr.	Nominal	Art der Ralage	Best. Nr.	Werk	Hersteller	Preis	Belastung	Realisier. m. a.	größte Füllmenge
1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10	1.1.10
1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11
1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12	1.1.12
1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13	1.1.13
1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14	1.1.14
1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15	1.1.15
1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16	1.1.16
1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17	1.1.17
1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18	1.1.18
1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19	1.1.19
1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20	1.1.20
1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21	1.1.21
1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22	1.1.22
1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23	1.1.23
1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24	1.1.24
1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25	1.1.25
1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26
1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27	1.1.27
1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28	1.1.28
1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29	1.1.29
1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30	1.1.30

Constructor has been selling mobile pallet racking for many years with our first order in 1957. Since then we have sold nearly 9,000 MOVO sales and demand is growing.

- ◀ **The start of a success story.**
First order of a mobile racking system was taken on January 24th 1957.
- Nearly 9,000 MOVO sales since then and still growing!**

From static to mobile - Strømnes Reklame, Norway

Strømnes Reklame is one of the leading suppliers in Norway of promotional items. Due to an increasing demand they needed more pallet spaces within their existing warehouse building. The warehouse was already heavily populated with traditional static racking and no more space appeared to be available.

By changing their static pallet racking system to MOVO the number of pallet spaces were increased by a staggering 70%, within the same sized building. The length, width and height in the warehouse was maximised to satisfy their demand for more pallet places.



At Strømnes Reklame
changing from Static to Mobile Pallet Racking
increased the number of pallet spaces by **70%**,
without having to expand the building.



More information see:
www.constructor-storage.com/MOVO

Layout options for mobile racking

The advantage of MOVO is that at the design stage it offers a choice between two different benefits. Do we use the space available and add more capacity? Or should we reduce the overall storage area?

► Conventional pallet racking



- Total storage area: 625 m²
- Number of pallet places: 1152
- Floor space used: 74%

► MOVO - increased capacity



- Total storage area: 625 m²
- Number of pallet places: 2304
- Floor space used: 74%

► MOVO - reduced storage area



- Total storage area: 625 m²
- Number of pallet places: 1152
- Floor space used: 46%

- ✓ Maximum use of floor space – only one operating aisle required
- ✓ Save up to 50% of the space required by conventional pallet racking

- ✓ Increase your storage capacity by up to 100%
- ✓ Dense storage can reduce energy bills in cold store environments

Mobile Pallet or Cantilever Racking

MOVO can be designed using pallet racking or cantilever racking. The principles remain unchanged with the storage unit being mounted on mobile bases which are controlled electronically.



ADVANTAGES OF MOBILE PALLET RACKING:

- ✓ High storage density
- ✓ Ideal for cold stores
- ✓ Easy to adjust
- ✓ Simple in handling



ADVANTAGES OF MOBILE CANTILEVER RACKING:

- ✓ Perfect for long goods
- ✓ Loads handled barrier-free
- ✓ No limitation in the length of the stored goods
- ✓ Adjustable arm length for deeper products

The frozen food logistics centre of D & S Fleisch, Essen

With a big increase in the export of meat products to Western and Eastern Europe as well as Asia, D & S Fleisch made the decision to invest in a new logistic centre for the storage and preservation of their expanding product range.

Up to 1,360 tons of meat are produced daily by the abattoirs at the D & S Fleisch GmbH in Essen, near Oldenburg, and what is not shipped as fresh product is immediately frozen and ends up in D & S Fleisch high-tech frozen logistics centre.

The refrigerated warehouse at the abattoir of D & S Fleisch ensures that up to 13,000 pallets of meat products remain in perfect condition at a constant -25 degrees until shipment.

TOTAL CAPACITY

- ✓ Freezer capacity: 180 tons per day
- ✓ Storage capacity: 12,968 Euro-pallets
- ✓ Production capacity: 180 pallets per hour
- ✓ Number of racking systems (MOVO): 15
- ✓ Number of static racking systems: 12



More information see:
www.constructor-storage.com/MOVO

Maximum safety features with MOVO

- ✓ Acoustic warning to announce imminent movement of trolleys
- ✓ LED flashing lights during movement
- ✓ Emergency stop buttons on each trolley instructs immediate cut off
- ✓ The global light barrier system runs along the front face checks all aisle movement. If a truck or person is in one of the aisles it will prevent any further trolley movement until they have exited.
- ✓ The local light barrier system runs down aisle of the trolleys and will stop the trolley if a person is located inside the aisle.
- ✓ Fork lift counting – release automatically when number of trucks is zero.



Safety
according to the
European Directive
2006/42/EG and
EN 15095

Controls

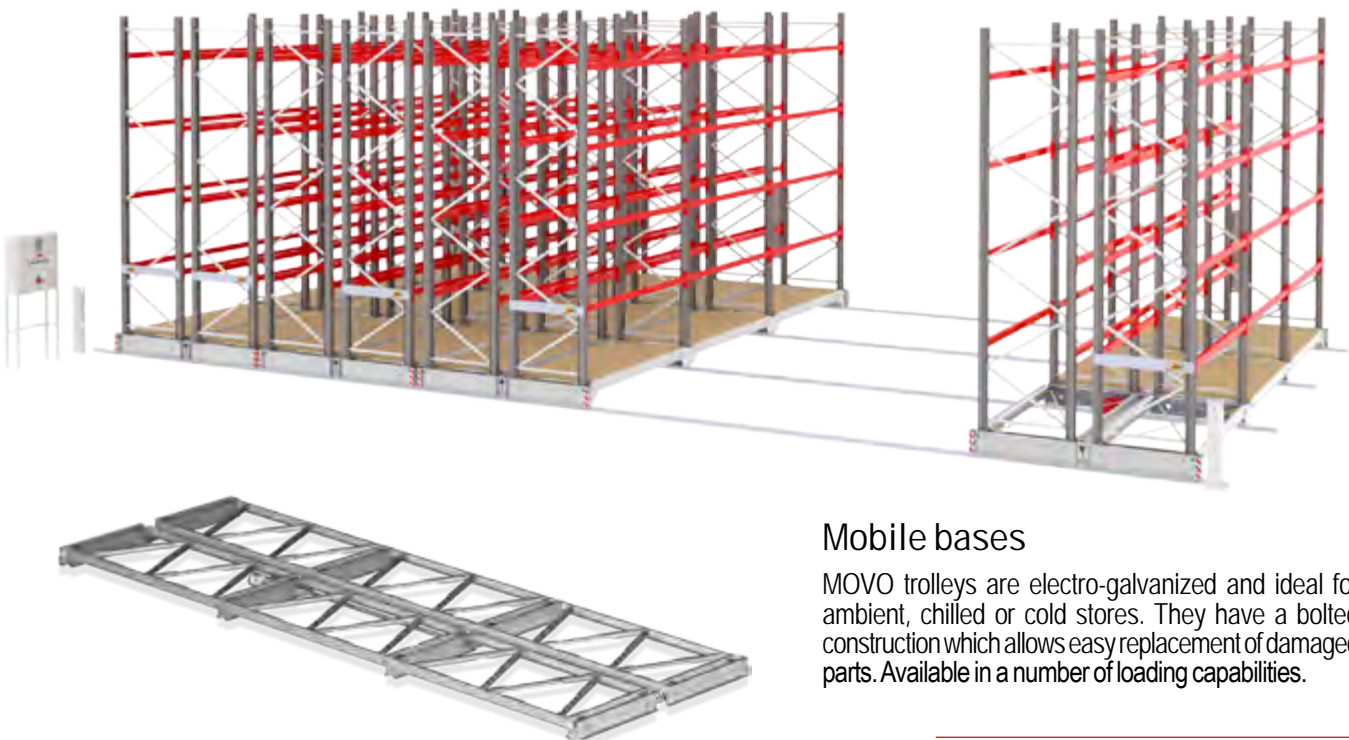
A range of various control options are available to meet all requirements:

- **Light control** – only the open aisle is lit
- **Commission mode** – open pre-selected aisles
- **Night position** – improves air circulation
- **Sprinkler position** – a mode for fire protection
- **Picking position** – multiple aisles partially open for access
- **Remote control** – diagnostic and maintenance from experts
- **Aisle selection via radio control** – remote controlled aisle selection saves time as the fork lift truck driver can open the aisles before arrival

Operating the MOVO can be done either from the central pilot control, from controls on each trolley or via remote radio control.

Rails

The design and quality of the rails together with correct installation, is a prerequisite for a safe, well working MOVO-system. MOVO rails are made from low profile steel and can be installed on an existing floor or integrated into a new floor. In either scenario concrete is molded between the rails to form a flat floor ensuring an even operating surface.



Mobile bases

MOVO trolleys are electro-galvanized and ideal for ambient, chilled or cold stores. They have a bolted construction which allows easy replacement of damaged parts. Available in a number of loading capabilities.



More information see:
www.constructor-storage.com/MOVO



Quality assured German engineering

The mobile bases that form the heart of a Constructor mobile racking system are designed and manufactured in Germany, in accordance with strict local legislation and all EU regulations. This quality assured product is checked during and after manufacturing to ensure that a reliable product is delivered to our customers, every time.

The electrical configuration is individually designed and verified by our electrical engineers and all electrical components are supplied from our factory in Germany.

Service & Maintenance

We understand the importance of having a fully operational warehouse at all times, so in the unfortunate event of a breakdown rest assured that we can get you up and running again as quickly as possible. Constructor provides a full professional service package to make sure quick response times if your product requires attention.

To make sure your mobile racking is in optimum condition Dexion also conducts a yearly dynamic safety check which includes thorough testing of the light barriers functions and software. This can be combined with your yearly rack inspection for minimum interruption to your daily operations.



More information see:

www.constructor-storage.com/Rack-Inspections



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