

A Member of the Constructor Group

MOVO mobile racking system

Optimal storage capacity with mobile heavy racking solutions



The mobile pallet racking system – an ingenious idea by Dexion



Since Dexion designed the first perforated steel profile for storage technology more than 60 years ago, it has been setting standards in flexibility and customer orientation. To this day, we have been developing and manufacturing our products in Germany – not only for but in close cooperation with our customers.

Dexion is the specialist in customised efficient warehouse logistics solutions. Based on our many years of experience in warehousing technology and a process of regular exchange with our customers, we are continuously developing and refining our products – in terms of engineering, quality, and design. Staying close to our customer is of particular importance to us. Dexion has a nationwide and comprehensive network of professionals in logistics in Germany. As a member of the Constructor Group, Dexion operates throughout Europe with offices in almost every European country. And for our customers, that pays off in short distances and quick response and delivery times.

Because, after all, we do not want to sell you just a ready-made system but develop – in close cooperation with you – a custom-tailored and flexible storage solution that meets your exact requirements.

Such as the MOVO mobile racking system: By utilising mobile heavy-load racking systems you can easily double the capacity in your existing warehouse or, in new buildings, save half of the required space – and all of this with optimal access facilities. An efficient and practical solution that adjusts to every situation on site and meets the highest safety standards.

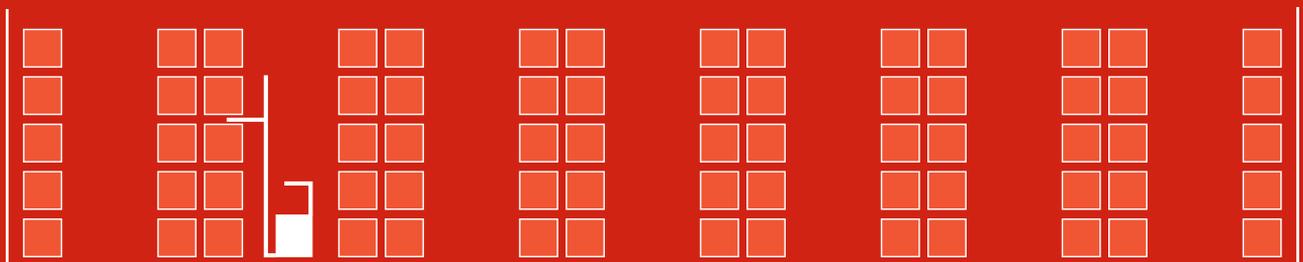
01 The MOVO 2010 in operation.

02 Start of a success story: first order of a mobile racking system on 24 January 1957.

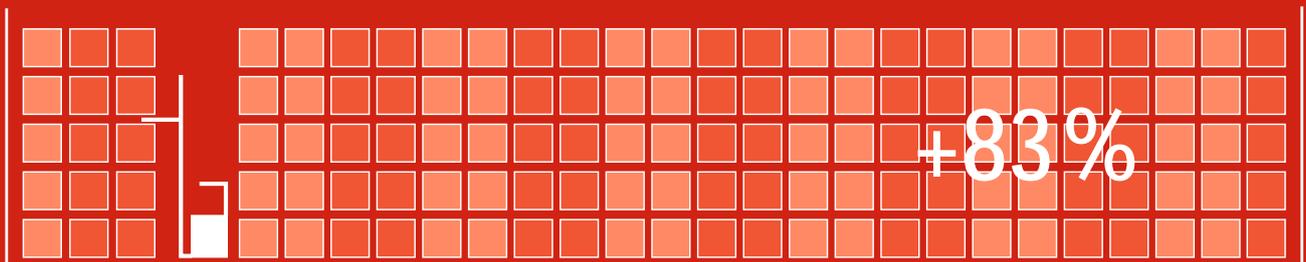
Best.-Datum	Komm.-Nr.	Kunde	Art der Anlage	Monte-Nr.	Wert	Montage-termin	Termin	geliefert	Konditionen	gelieferte-fähigkeit
11.01.57	100000	Fabrik der Automobilwerke Düsseldorfer Automobilwerke Kunden-Nr. 100000	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	020	1.000,00	11.01.57	✓	11.01.57	✓	✓
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11.01.57	100001	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100001	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	022	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100002	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100002	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	023	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100003	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100003	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	024	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100004	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100004	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	025	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100005	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100005	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	026	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100006	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100006	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	027	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100007	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100007	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	028	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100008	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100008	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	029	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100009	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100009	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	030	1.000,00	11.01.57	✓	11.01.57	✓	✓
11.01.57	100010	Werkstoff-Fabrik Karl-Friedrich-Werk Kunden-Nr. 100010	2. Halbautomatische Stapel- anlage für 2000 Stk. mit 2000 Stk. 2000 Stk.	031	1.000,00	11.01.57	✓	11.01.57	✓	✓

Whenever it's about increasing your storage capacity, MOVO heavy load racking systems made by Dexion are the optimal solution. Whether you wish to make better use of existing space or reduce the costs of a new building: our mobile racking systems efficiently create more space for your goods – and that is with unrestricted access to all pallets.

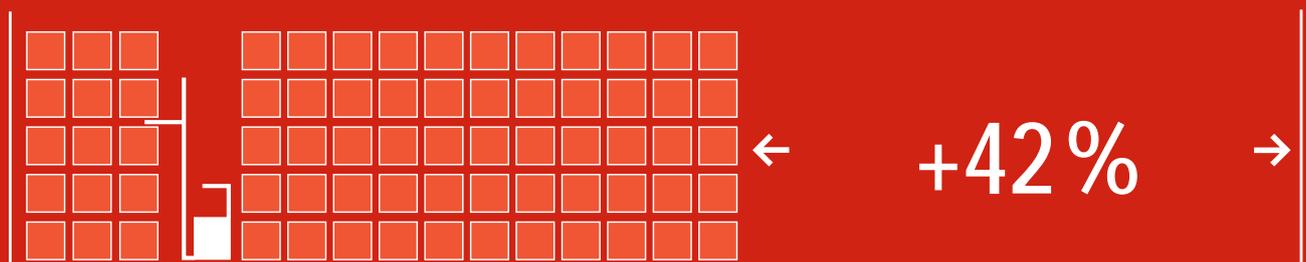
Mobile solutions by the market leader – Dexion MOVO



Standard pallet racking



Increase in storage capacity



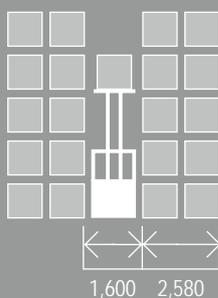
Increase in useable area

Dexion is an international market and technology leader in the field of mobile heavy-load racking systems with over 9,000 planned and installed systems for customers worldwide. With our experience over decades as developers, producers and suppliers of MOVO racking systems we develop – with you – the optimal storage solution designed to your exact requirements. We take full

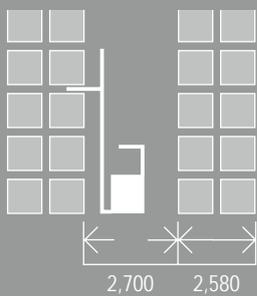
care of project realisation, hand over complete turnkey solutions and offer a comprehensive maintenance and service network.

MOVO can be used for all types of rack storage and standard forklift systems – for reach trucks as well as front-loading staplers and small aisle forklifts. The systems can even be accessed from below by reach

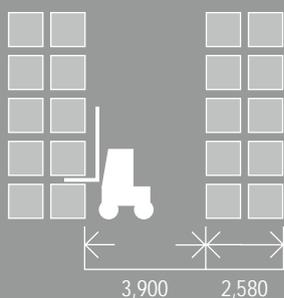
trucks or claw stackers. Depending on the forklift used, the additional/saved space presents itself in many different ways: Our MOVO specialists can calculate the size of the saving in your particular case by means of your specifications – accurately and, of course, without obligation.



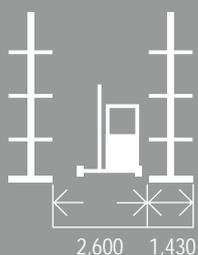
Handling with guided high lift stacker
 Increase in storage capacity **approx. 50 %**
 Increase in useable area **approx. 32 %**



Handling with reach truck
 Increase in storage capacity **approx. 83 %**
 Increase in useable area **approx. 42 %**



Handling with front loader
 Increase in storage capacity **approx. 110 %**
 Increase in useable area **approx. 47 %**



Handling with side lifter or four-way reach truck
 Increase in storage capacity **approx. 150 %**
 Increase in useable area **approx. 54 %**

Optimal use of space

Each MOVO racking system is tailored to suit the exact requirements of each single customer. And it not only adjusts to fit any room requirements but also takes into account the type of goods to be stored and the logistics already available on site. Here, its modular design is key to the exceptional adaptability of the MOVO racking systems: they are available in different weight categories and of course the rack frames are available in various depths and lengths.

Extremely cost-saving

Additional space with MOVO means: Storing more goods on the same space, or requiring less space for the same amount of goods. In either case, reduction of the total area equals lower investment and operating costs compared to static storage solutions. For this reason, the energy costs spent on heating, cooling, illumination, etc. are lower. Shorter routes and 100 % availability of goods increase the efficiency of pallet storage.

Sizes und capacity variants

Trolley length: up to 90 m

Rack height: up to 12 m

Bay load: 4 t to 24 t

Shelf load: up to 6 t



01

- 01 The largest "mobile refrigerator" world-wide: MOVO with different climate-controlled zones.
- 02 Creating space and mobility: Dexion MOVO.
- 03 17,000 mobile pallet places for the Greiwing company, Germany.



02



Total flexibility

The modular design of the MOVO racking systems does not only allow for optimal adjustment to existing room requirements, it also guarantees total flexibility: Each MOVO system by Dexion can be altered, shortened or extended without any problems according to your very individual requirements. We therefore advise our customers when building a new storage hall not to hesitate and install a complete MOVO rail system – to optimally prepare for subsequent business growth.

High-quality finish

To guarantee your systems durability, all carriage components are permanently protected against environmental influences. Whilst most other manufacturers apply one coating to their components, Dexion manufactures only galvanised parts for the MOVO racking systems – for better corrosion protection and therefore more pleasure in your investment.

Technical superiority

On top of that, every MOVO racking system can be used also in extreme temperatures: a standard racking system is fully operable in temperatures down to -30°C , and optionally down to -40°C . Thanks to this technical superiority and the know-how behind it, Dexion is clearly setting standards when comes to optimal storage solutions in the deep freeze area.



03

Get your warehouse moving
– with technical superiority and total flexibility

Well-designed control concept

Based on decades of experience in the field of mobile racking systems, we have developed a state-of-the-art MOVO control concept which, besides the user-friendly steering of your system, offers various other possibilities: In addition to conventional manual operation, the control can be used to wirelessly speed up and simplify individual work processes – aisles, for example, can already be remotely opened when the forklift is still on its way there.

As a fully automated solution, your MOVO racking system can at your request be easily integrated into a ERP or warehouse management system. The centrally controlled WMS sends picking lists to the forklift truck driver and leads him to the right storage location afterwards. For this solution, Dexion will provide just the required interface, deliver also the respective software, or take care of the complete integration into your system.

Incredibly versatile

The more closely a storage solution can adapt to your requirements, the better. The comprehensive configuration options turn MOVO into a versatile complete solution: when access is required, up to four aisles can be opened at the same time up to allow for efficient order picking. To save energy, it is possible to have only the open aisles automatically lit. And the so-called “night mode” positions the system to allow for optimal air circulation between the stored goods.



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01 Mobile control unit for a warehouse management system.

02 State-of-the-art drive technology.



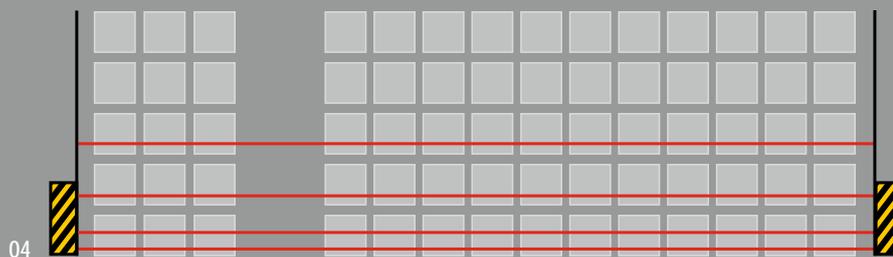
Maximum safety

For maximum protection of operator, forklift and your goods at any time, each MOVO racking system is equipped with state-of-the-art sensor technology: light barriers register every move into and out of the aisles, and only when no person is left in the aisles it is possible to operate the system. Moreover, the entire system

stops immediately the moment a potential hazard is recognised. Each movement of the system is indicated by acoustic warning and light signals. And the system goes even further; MOVO complies with all national and international safety requirements.

And for the storage of potentially explosive goods – as often found in the chemical industries, for example – the system is also available in a special, explosion-proof version.

Increased speed, efficiency, safety – thanks to state-of-the-art control concepts



04

03 Operator panel at a MOVO racking system.

04 Access control and forklift counter.

03



The customer

World-wide one of the largest bus and coach manufacturers. The company employs 13,000 staff, 9,000 of them in Germany, and guarantees its world-wide customer base spare parts availability up to 15 years after delivery of the first series.

The requirement

Creation of a “Dynamic Centre for fast-moving items” on a floor space of 35,000 m². With nearly 100,000 different spare parts to be stored, one thing is clear: This wide range of different parts calls for a solution that comprises different types of racking systems. An optimal storage solution has to be found also for the large and bulky fast moving parts that nevertheless make up 20 percent of the goods.

The solution

The approximately 12 m high, 6-aisle mobile racking system is a part of the overall solution and moves behind static high-bay racks on a floor space of 1,700 m². Two aisles are left empty for picking and putting operations with fork-lift trucks creating space for 4,500 pallet places and altogether 3,700 articles. Each shelf can take up to 3,000 kilogram of heavy goods. Every day, up to 200 picks are handled in this section. The whole Dynamic Centre has been designed to cope with up to 8,000 customer picks per day, and operates web-based/ fully WI-FI-based. All this is done by 200 employees who pick the required goods in two shifts and a fleet of over 30 forklift trucks.

The result

In comparison with the old warehouse, turnover has increased significantly despite the relatively low degree of automation. The project responsible described working with Dexion as very constructive and positive. Detailed solutions in particular were handled with much flexibility and a positive attitude. The project leader has no doubt that the company will continue the close cooperation it has shared with Dexion for more than 30 years, just as he has full trust in the achievement potential of the new Dynamic Centre.



Total capacity of MOVO

Size of the logistics centre: 32,000 m²
(including loading and dispatch hall for heavy goods vehicles)

Storage capacity of the automated small parts warehouse : 44,000 storage locations

Storage capacity of the high-rack storage system: 24,000 pallet places

Performance:
up to 8,000 customer picks per day

01 Living up to its name: mobile MOVO in the Dynamic Centre for bus spare parts.

There are many good reasons to choose Dexion



Innovation

Dexion is the specialist for individual and efficient solutions in warehouse logistics. Based on our experience in warehouse technology and in a process of constant exchange with

our customers, we are constantly developing and refining our products – in terms of engineering, quality, and design.

Innovation made by Dexion.

Efficiency

Staying close to our customers is important for us: Dexion offers a nation-wide network of logistics specialists. As a member of the Constructor Group, Dexion is present all over Europe with its locations in

nearly every single European country. And that pays off for our customers: in extremely short distances, fast response and delivery times and a maximum level of flexibility.

Efficiency made by Dexion.

Individuality

Dexion is your partner on the way to a tailor-made logistics solution that exactly matches your requirements. With Dexion MOVO mobile racking systems and its comprehensive

accessories, we offer you a system that has been designed to meet your individual customer requirements.

Individuality made by Dexion.

Synergies

Around the globe, well-known companies rely on the quality and efficiency of our products and the reliability and longevity of our logistics solutions. With Dexion, you get a solution

with added value, not just a storage system.

Synergies made by Dexion.

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