



Loading Bay Solutions

Optimise Your Goods Flow









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Gateways For Logistics

Loading bays provide a bridge to load trucks in logistic hubs, retail outlets, hotels, hospitals, postal services, etc. Using dock levellers promotes the safety of the goods and operators, facilitating loading and unloading operations efficiently.

MHE-Demag, partnering with Blue Giant since 1988, is a premier supplier of dock levellers for the warehousing and logistics industry across Asia-Pacific and boasts more than 20,000 installations in all types of warehouses. Our range of loading bay equipment is known for its quality and reliability, with many testimonies from satisfied customers.



Dock Levellers - Bridging The Bay

Building a bridge across warehouse floors and incoming trucks, **MHE Dock Levellers** have become an essential equipment in logistics facilities. Our dock levellers are installed in pits, on frame or on ramps, depending on the layout of a loading bay.

Pit Style Dock Levellers are mounted inside a purpose built concrete pit and flushed to the floor level of the loading bay when parked. This allows smooth cross-traffic of forklifts.

Frame Supported Dock Levellers are an ideal solution when a concrete pit is not possible. Supported with a sturdy steel frame the dock levellers are projected out from the loading bay.

Dock Levellers on Concrete or Steel Ramps are an option when a facility does not have a loading bay or when there is insufficient space available in the loading bay.

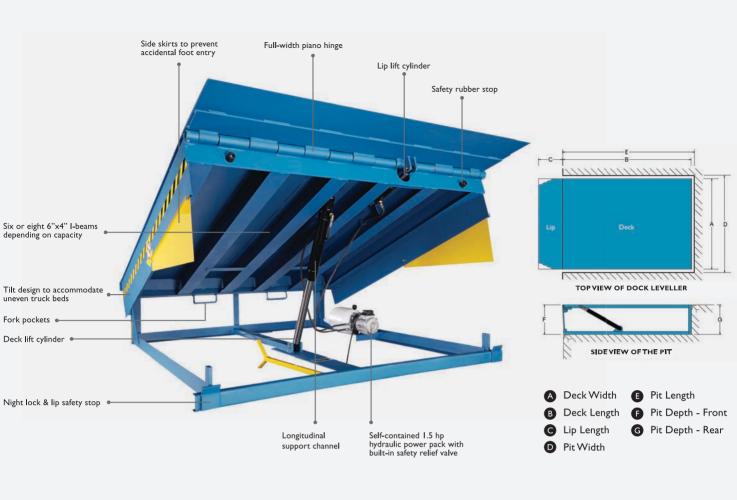






Frame supported

Dock leveller on ramp



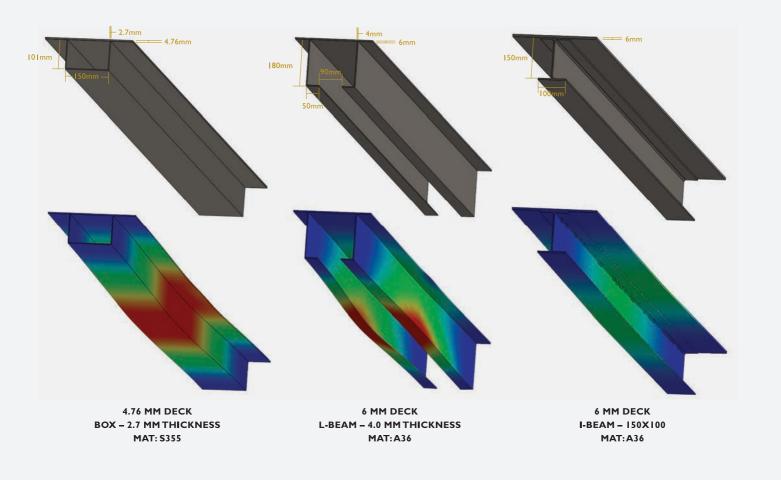
The Gateway For Logistics

Our diamond deck with I-beam underdeck support and autotilt technology ensures stability. Safety features such as toe guards and fall-safe hydraulic system with rupture valves ensure the safety of operators and equipment. The standard range designs have rated capacities of 13.6 t and 22.7 t (ANSI), with a vertical working range of +/- 305 mm. Standard power supply is 3ph / 400V / 50-60Hz. Custom variations are available upon request.

Dock Leveller Specifications

HYDRAULIC					DOCK LEVELER DIMENSIONS (MM)				PIT DIMENSIONS (MM)			
					DECK		LIP	OVERALL			DEPTH	
MODEL	TYPES		CAPACITIES (TONNES)		WIDTH (A)	LENGTH (B)	LENGTH (C)	LENGTH (B+C)	WIDTH (D)	LENGTH (E)	FRONT (F)	REAR (G)
A586	FH	FHE	13.6	22.7	1525	1510	406	1916	1575	1555	508	495
A686	FH	FHE	13.6	22.7	1830	1510	406	1916	1880	1555	508	495
A688	FH	FHE	13.6	22.7	1830	2120	406	2526	1880	2165	508	495
A6810	FH	FHE	13.6	22.7	1830	2730	406	3136	1880	2775	508	495
A6812	FH	FHE	13.6	22.7	1830	3340	406	3746	1880	3385	508	495
A6686	FH	FHE	13.6	22.7	1980	1510	406	1916	2030	1555	508	495
A6688	FH	FHE	13.6	22.7	1980	2120	406	2526	2030	2165	508	495
A66810	FH	FHE	13.6	22.7	1980	2730	406	3136	2030	2775	508	495
A66812	FH	FHE	13.6	22.7	1980	3340	406	3746	2030	3385	508	495
A786	FH	FHE	13.6	22.7	2110	1510	406	1916	2160	1555	508	495
A788	FH	FHE	13.6	22.7	2110	2120	406	2526	2160	2165	508	495
A7810	FH	FHE	13.6	22.7	2110	2730	406	3136	2160	2775	508	495
A7812	FH	FHE	13.6	22.7	2110	3340	406	3746	2160	3385	508	495

FHE: Dock Leveler with Single Push Button. | FH: Dock Leveler with Individual Deck and Lip Control. | Power Supply: Standard is 3ph / 400V / 50-60Hz. Other power options are available upon request.

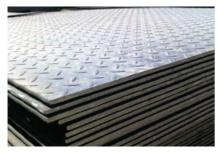


Heavy-Duty Diamond Deck

To choose the right dock leveller it is eminent to consider the forces it will be exposed to.

A standard 2 t forklift with a 2 t load weighs approximately 6 t. In motion this forklift has a tonne-force of 15 t and — exponentially compounded by the usage frequency — the dock leveller is exposed to immense bending stress. With the tonne-force and goods flow in mind, our series was developed with a heavy duty diamond deck, the sturdiest deck in the market, to provide stability and long life to the equipment.

For the strongest underdeck support cold rolled profile I-beams are the sturdiest structural members. As seen above, these have the highest structural strength. To further reinforce and structurally perfect the dock leveller, we can integrate a 9 mm diamond deck plate, transferring optimum load distribution and minimizing the possibility of dishing deformations.







Heavy-duty i-beams



Finished product



Auto-Tilt Technology

Trucks reverse up to the loading bay with unlevelled or tilted truck beds. Furthermore, during loading and unloading the truck tilts in the suspensions as the load distribution changes. A lip of a dock leveller that is not flush with the truck bed creates problems. Unless the dock leveller is able to float and follow the tilt level of the truck bed, there will be wobbling and twist deformations of the deck taking place.

To prevent such structural engineering problems, our dock levellers come with auto-tilt technology, whereby the dock leveller deck can tilt either side up to 100 mm upwards. The entire deck is able to float and adapt to the truck level, ensuring that the lip is always resting across the truck bed when the forklift drives over it. This eliminates torsion and stress on the deck.



Close-up of tilt-pocket



No shaking or wobbling



No chipping of tires

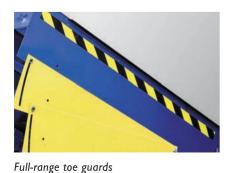


Safety At The Bay

Toe Guards on the flanks of the dock leveller ensure that feet, equipment and materials are not accidentally jammed under the decks, to prevent injuries and damages.

Fall-safe rupture valves of the hydraulic systems ensure the dock is maintained at level if a truck accidentally departs while the dock leveller is engaged or in the unlikely event a hydraulic hose bursts.

Truck Restraints prevent unintentional departure of trucks from the loading bay. They are designed to hold the ICC bar of any type of trailer to the loading dock. The truck restraints can either be manually operated or with automatic push-button electro-hydraulic operation.





Rupture valves

Truck restraint



Controls & Signals

From standalone control boxes to interlocking systems of docking equipment, MHE-Demag provides operation and access solutions tailored to all needs.

As standard we provide single button control panels (FHE) or with independent lip control (FH). If required, a low voltage (24 V DC) control box is available, which ensures operators are not exposed to hazardous voltage at the push buttons. Moreover, these are weatherproof with IP 66 rating.

When integrated controls are requested, **Blue Genius™ Master Control Stations** integrate dock levellers, doors, shelters and truck restraint into one concerted system, to operate the entire loading bay in synch to safe time and increase safety.

It is even possible to integrate **Access Control Systems** to ensure that only authorised personnel can access and operate the loading bays via access card or biometric identification.

Our range of **Signals, Signs and Traffic** Lights can further aid safe loading processes within the dock.



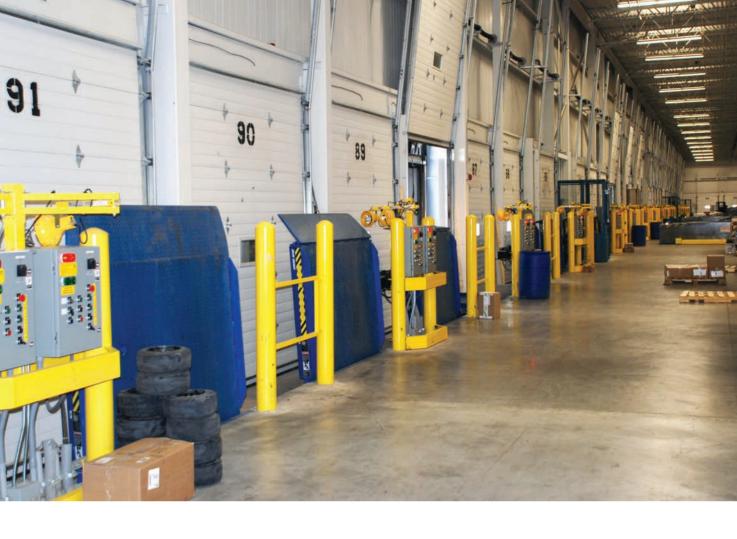
FHE control panel



Blue Genius™ controls



Signals & warning signs



Other Dock Leveller Types

To suit all types of warehousing facilities here are further docking solutions:

Vertical Dock Levellers are ideal for cold storage applications, where the doors have to be fully closed and sealed when dock levellers are not in use. As the dock is stored in a vertical position, they also solve space limitations in the loading area.

To protect the structure from corrosion and dirt, dock levellers are also available as **Galvanized Versions**. These types are often required in the food industry.

For operations in warehouses where overhead doors require enhanced protection, dock levellers with XDS Barriers prevent forklifts from overrunning and also act as pallet stops. They are hydraulically activated when the dock levellers are not in use and constructed to stop 4.5 t loads up to 6.4 km/h.

Edge-Of-Docks are suitable for loading bays that are built near truck bed level. Mounted on the face of the dock wall it provides a safe and self storing dock.



XDS barrier



Edge-of-dock



Dock Lifts

Dock Lifts, also called **Elevating Docks**, is a solution for warehouses without raised loading bays, or when the vertical elevations of serviced trucks are out of range.

Dock lifts are an alternative to loading/unloading trucks with a forklift from the ground. They reduce handling time and are safe for operators and cargo. With a dock lift a heavy load can even be handled by means of only hand pallet trucks from ground to truck bed.

Dock Lifts come in various standard sizes with capacities up to 9 t. The dock lifts can be mounted in a pit or anchored to the concrete floor. They are also suitable for existing loading areas.

Semi-Portable Dock Lifts follow the same concept as standard dock lifts but are not fixed to the floor. You can shift them between different locations wherever they are required.



Standard dock lift



Dock lift with side skirts



Semi-portable dock lift



Dock Seals & Shelters

Dock seals and shelters help to reduce energy loss, maintain internal temperature and protect products and packaging from dust and other elements. They are especially vital for cold storage and clean room warehouses.

Foam Pad Dock Seals lock the truck/container opening to the warehouse through the compression onto the serviced truck. While they provide an economic sealing solution, they are designed for loading docks where container sized trucks are serviced. **Inflatable Dock Seals** provide a tight sealing and have the flexibility of servicing trucks of different heights and widths. They also can be used in problematic dock areas with sloped or difficult driveway approaches.

Retractable Dock Shelters offer the greatest versatility, as they can accommodate the widest range of vehicles. As they reach out to cover the truck, they are especially useful to protect goods and personnel from rain, dust, insects and extreme weather conditions.



Loading bay with inflatable dock seal



Loading bays with retractable dock shelter



Dock houses with retractable dock shelters



Industrial Doors

Our **Sectional Doors** come with full insulated panels using EnergoflexTM and polyurethane insulation against water, wind and heat. Optional windows let in daylight while ensuring that incoming trucks are visible from the inside when the door is closed. Even pass doors are possible.

High Speed Doors are essential when you need quick sealing of air flow. With opening speed of 1.2 m/sec. and closing speed of 0.8 m/sec, we offer some of the fastest doors in the industry. They can be activated manually, remote or automatically, ensuring a hassle-free goods flow.

The durable material of these doors is made of reinforced polyurethane sandwich panels. For the safety of operators and equipment, the doors come with bendable panels at the bottom edge and, upon request, can also be equipped with photo cells and cushioning bottom safety edges to prevent them from closing when there is an obstruction in the doorway.



Standard sectional door



Sectional door with pass door



High speed door



Easy Installation & Maintenance

For easy installation and maintenance, the following optional solutions can be offered:

Pit Kit

With the help of a pit kit loading bay pits are quickly and accurately build. Simply put the pit kit in place, pour concrete around the structure up to the curb angles, let the concrete settle and — done!

Levelling Bolts

Levelling bolts at the rear end of the dock leveller can adjust the deck to the loading bay floor level remotely from the top of the deck, while the front and centre of the dock leveller can be adjusted standing in front of the dock leveller. No shims are required.

Front Access

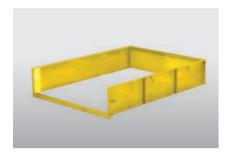
With the power pack right at the front, the hydraulic oil level is easily checked and the motor is accessible from outside, too.

Maintenance struts with retrieval hook

With a retrieval hook our maintenance struts can be engaged without the need of getting the hand and body under the powered deck and lip. Simple and Safe!

RC for maintenance (one man job)

With a remote control a single person can operate and raise the deck from the front of the dock leveller and safely engage the maintenance strut single handed.









Levelling bolts Remote control

Pit kit



360° Customer Care

To ensure proper usage of your equipment, we conduct trainings that cover all technical aspects as well as all safety issues and procedures for execution and maintenance.

If a machine needs to be repaired or rehabilitated, we are also ready to help you get the job done. To deliver speedy maintenance services, we keep an inventory of the most vital and frequently used parts. With over 70 service centres in the region, a team of more than 700 service engineers and technicians as well as a fleet of 300 service vans, we are there whenever you need us — around the clock, 24/7.

We are also able to conduct equipment audits, regularly or upon request, and provide a detailed report on the condition of your equipment. With our preventive maintenance services, you can be sure that your equipment will always be in good working condition.







Service hotline



Service vehicles

OVER 70 SALES & SERVICE OFFICES ACROSS THE ASIA-PACIFIC





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