



LOADING DOCK SYSTEMS

LOADING DOCK SYSTEMS
HIGH SPEED DOORS
LIFT TABLES
DOCK SHELTERS
SECTIONAL DOORS
COMPL. FOOD INDUSTRY

LOADING DOCK SYSTEMS

LOADING DOCK SYSTEMS

Loading dock systems enable you to carry out goods loading and unloading operations, overcoming differences in height between the warehouse and the vehicle and ensuring a perfect fit to achieve maximum SAFETY, SPEED and PROFITABILITY.

MS METALSYSTEM manufactures all the equipment necessary for loading docks:

- Dock levellers with hinged lip
- Dock levellers with telescopic lip
- Lift tables
- Sectional doors
- Dock shelters
- Alignment barriers
- Rubber protections

Our products are manufactured using top QUALITY materials and the latest TECHNOLOGY.

All our loading dock equipment is available in different versions made of suitable materials depending on the risk of corrosion:

STAINLESS STEEL

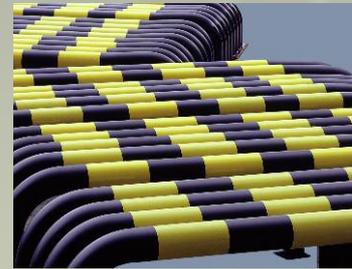
GALVANISED STEEL

PAINTED STEEL

And different combinations of the above.



MS METALSYSTEM®



HINGED LIP DOCK LEVELLERS



DOCK LEVELLERS WITH HINGED LIP

MS METALSYSTEM dock levellers with hinged lip enable you to carry out goods loading and unloading operations, overcoming differences in height between the warehouse and the vehicle and ensuring a perfect fit.



MSRH-TI-20/25

MODELS IN DIFFERENT MATERIALS

Our dock levellers are available in different materials depending on the risk of corrosion: painted steel, galvanised steel, **STAINLESS** steel and combinations of these.

	MSRH-AP	MSRH-PG	MSRH-TG	MSRH-GI	MSRH-TI
Top platform	Painted Steel	Galvanised Steel	Galvanised Steel	Stainless Steel	Stainless Steel
Front lip	Painted Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Stainless Steel
Telescopic side lips	Painted Steel	Painted Steel	Galvanised Steel	Stainless Steel	Stainless Steel
Chassis and bottom structure	Painted Steel	Painted Steel	Galvanised Steel	Galvanised Steel	Stainless Steel
Cylinders	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Stainless Steel
Fittings	Zinc-Coated Steel	Zinc-Coated Steel	Zinc-Coated Steel	Zinc-Coated Steel	Stainless Steel



Loading dock system without tail lift recess



Loading dock system with tail lift recess

Stainless Steel Models

These are made from AISI-304 / 316S **STAINLESS** steel, fully shot blasted with glass beads.

Galvanised Steel Models

These are made from carbon steel and hot galvanised by immersion.

TECHNICAL FEATURES

The **structure** is designed to ensure high longitudinal strength and the maximum permitted transversal elasticity in order to achieve perfect docking between the dock and the vehicle.

Self-supporting steel lower chassis, with a fixing bar for maintenance.

Top platform and front lip made of **non-slip embossed steel plate** (6/8mm thick on painted and galvanised steel models, 8/10mm on **STAINLESS** steel models).

Front lip made of non-slip embossed steel plate (13/15mm thick on painted and galvanised steel models, 15/17mm on **STAINLESS** steel models).

Lip with curve on the edge to make docking with the vehicle easier.

Electro-hydraulic operation, including automatic lip movement.

24V 1.5-horsepower motor with built-in control button pad, plus emergency stop.

Hydraulic cylinders equipped with one-way valves.

Oil-pressure controlled action, without microswitches.

Subframe for setting into the ground.

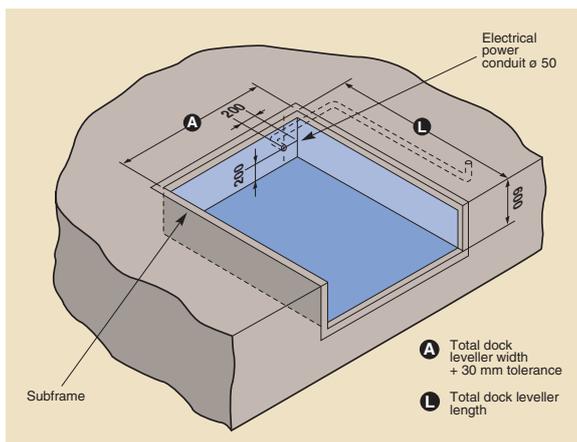
The quality of the materials used to manufacture the dock levellers, the strength tests carried out, the telescopic side lips and the striped side markings ensure complete safety.

CE marking.



MSRH-AP-20/25

DIMENSIONS OF PIT



DIMENSIONS AND LOADING

Model	Width (mm.)	Length (mm.)	Working Measures (mm.)	Upward Run (mm.)	Downward Run (mm.)	Traffic Kg.
MSRH-18/20	1.800	2.000	2.400	700	330	6.000
MSRH-18/25	1.800	2.500	2.900	750	330	6.000
MSRH-18/30	1.800	3.000	3.400	800	330	6.000
MSRH-20/20	2.000	2.000	2.400	700	330	6.000
MSRH-20/22	2.000	2.200	2.600	720	330	6.000
MSRH-20/25	2.000	2.500	2.900	750	330	6.000
MSRH-20/30	2.000	3.000	3.400	800	330	6.000
MSRH-20/35	2.000	3.500	3.900	850	330	6.000
MSRH-20/40	2.000	4.000	4.400	900	330	6.000

We also make dock levellers to support dynamic loads of 10,000 kg, 12,000 kg or any other specification.

TELESCOPIC LIP DOCK LEVELLERS



DOCK LEVELLERS WITH TELESCOPIC LIP

This model of dock leveller has 1 metre long telescopic lip, which slides out horizontally. It allows the door to close down to the lower level of the dock leveller, so ensuring a high degree of INSULATION for thermal and hygiene purposes. It is also the most suitable solution for side loading dock.



MSRHR-TI-20/25

MODELS IN DIFFERENT MATERIALS

Dock levellers with telescopic lip are made in different materials depending on the risk of corrosion: Painted steel, galvanised steel, **STAINLESS** steel and combinations of these.

	MSRH-AP	MSRH-PG	MSRH-TG	MSRH-GI	MSRH-TI
Top platform	Painted Steel	Galvanised Steel	Galvanised Steel	Stainless Steel	Stainless Steel
Front lip	Painted Steel	Galvanised Steel	Galvanised Steel	Galvanised Steel	Stainless Steel
Telescopic side lips	Painted Steel	Painted Steel	Galvanised Steel	Stainless Steel	Stainless Steel
Chassis and bottom structure	Painted Steel	Painted Steel	Galvanised Steel	Galvanised Steel	Stainless Steel
Cylinders	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Stainless Steel
Fittings	Zinc-Coated Steel	Zinc-Coated Steel	Zinc-Coated Steel	Zinc-Coated Steel	Stainless Steel



Stainless Steel Models

These are made from AISI-304 / 316S **STAINLESS** steel, fully shot blasted with glass beads.

Galvanised Steel Models

These are made from carbon steel and hot galvanised by immersion.

TECHNICAL FEATURES

The **structure** is designed to ensure high longitudinal strength and the maximum permitted transversal elasticity in order to achieve perfect docking between the dock and the vehicle.

Self-supporting steel lower chassis, with a fixing bar for maintenance.

Top platform and front lip made of **non-slip embossed steel plate** (6/8mm thick on painted and galvanised steel models, 8/10mm on **STAINLESS** steel models).

Automatic front telescopic lip that slides out 1000mm. It is made of non-slip embossed steel plate (13/15mm thick on painted and galvanised steel models, 15/17mm on **STAINLESS** steel models).

Lip with bevelled edge to make docking with the vehicle easier.

Electro-hydraulic operation, including automatic lip movement.

24V, 2-horsepower motor with built in control button pad, with selector switch and emergency stop.

Hydraulic cylinders equipped with one-way valves.

Oil-pressure controlled action, without microswitches.

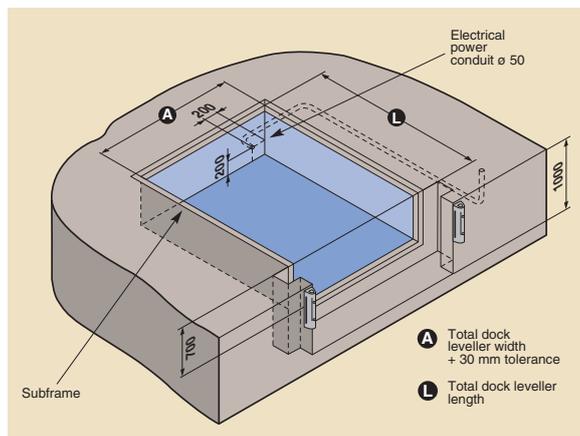
Subframe for setting into the ground.

The quality of the materials used to manufacture the dock levellers, the strength tests carried out and the telescopic side lips with striped side markings ensure complete safety.

CE marking.



DIMENSIONS OF PIT



DIMENSIONS AND LOADING

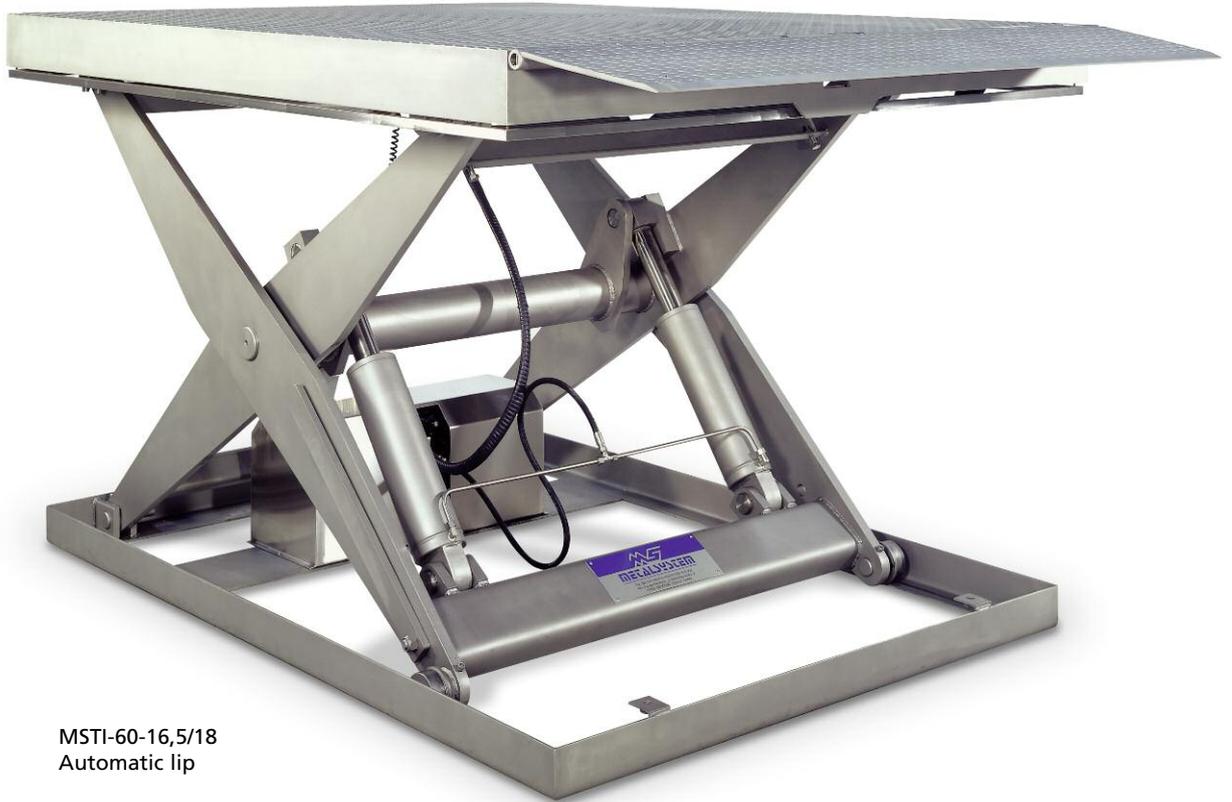
Model	Width (mm.)	Length (mm.)	Working measures (mm.)	Traffic (Kg.)
MSRHR-18/20	1.800	2.000	3.000	6.000
MSRHR-20/20	2.000	2.000	3.000	6.000
MSRHR-20/22	2.000	2.200	3.200	6.000
MSRHR-18/25	1.800	2.500	3.500	6.000
MSRHR-20/25	2.000	2.500	3.500	6.000
MSRHR-18/30	1.800	3.000	4.000	6.000
MSRHR-20/30	2.000	3.000	4.000	6.000
MSRHR-20/35	2.000	3.500	4.500	6.000
MSRHR-20/40	2.000	4.000	5.000	6.000

We also make dock levellers to support dynamic loads of 10,000 kg, 12,000 kg or any other specification.

LIFT TABLES

The LIFT TABLE is the most suitable solution for loading docks where:

- There is no difference in floor height between the warehouse and the outside.
- Vehicles of different heights, from ground level up to 2 metres, have to be unloaded.



MSTI-60-16,5/18
Automatic lip

MATERIALS

Lift tables are made in different materials depending on the risk of corrosion: painted steel, galvanised steel, **STAINLESS** steel and combinations of these.

TECHNICAL FEATURES

The scissor **structure** of lift tables is made of solid steel to ensure maximum stability in movement.

The top platform is built in highly rigid stainless steel with a reinforced structure underneath it to ensure **high strength** and avoid any distortion.

All the pivoting joints are equipped with self-lubricating Teflon bearings to ensure **long life** and avoid any friction or possible corrosion.

The hydraulic cylinders are equipped with an internal **safety** valve to stop the lift table falling in the event of any of the hydraulic oil lines breaking.

The highly sensitive anti-shear frame is made from **STAINLESS** steel to avoid any corrosion which might hinder its operation, preventing any accidents during lowering of the lift table.

Manually-operated folding safety bar for maintenance.

The lift table operates at 24V for maximum safety.

Electrical control panel with emergency stop button.

Conforms to the UNE-1570 standard.

DIMENSIONS AND LOADING

Model	Width (mm.)	Length (mm.)	Elevation (mm.)	Closed Height(mm.)	Load (Kg.)	Motor
MS 20-15/15	1.500	2.200	1.500	310	2.000	3 C.V.
MS 20-15/18	1.800	2.200	1.500	310	2.000	3 C.V.
MS 20-20/15	1.500	3.000	2.000	350	2.000	3 C.V.
MS 20-20/18	1.800	3.000	2.000	350	2.000	3 C.V.
MS 30-15/15	1.500	2.200	1.500	350	3.000	3 C.V.
MS 30-15/18	1.800	2.200	1.500	350	3.000	3 C.V.
MS 30-20/15	1.500	3.000	2.000	380	3.000	3 C.V.
MS 30-20/18	1.800	3.000	2.000	380	3.000	3 C.V.
MS 60-12,5/15	1.500	2.200	1.250	430	6.000	5,5 C.V.
MS 60-12,5/18	1.800	2.200	1.250	430	6.000	5,5 C.V.
MS 60-16,5/15	1.500	2.500	1.650	430	6.000	5,5 C.V.
MS 60-16,5/18	1.800	2.500	1.650	430	6.000	5,5 C.V.
MS 60-16,5/20	2.000	3.000	1.650	430	6.000	5,5 C.V.
MS 60-21/18	1.800	3.200	2.100	450	6.000	5,5 C.V.
MS 60-21/20	2.000	3.200	2.100	450	6.000	5,5 C.V.

OPTIONS

Top platform

Top platform made with smooth or tear sheet steel.

Lips

To ensure perfect docking between the dock and the vehicle, loading dock lift tables ALWAYS have MANUALLY or AUTOMATICALLY operated lips.

MANUAL lips are made in several sections to make them easier to handle and put in place.

AUTOMATIC lips are operated hydraulically.

Operation

Loading dock lift tables are operated using a button pad or by remote control.

Curtain

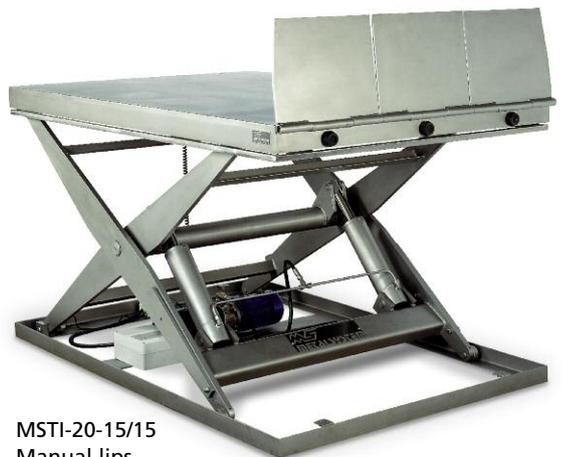
A curtain can be fitted to the front of the loading dock lift table to stop smoke and dust getting in.



Loading dock with height difference



Loading dock with no height difference



MSTI-20-15/15
Manual lips



MSTI-20-15/18
Automatic lip and curtain



MSAP-20-23/20
Safety rails

SECTIONAL DOORS

SECTIONAL DOORS are the most efficient solution for loading docks. They slide vertically to be housed at the top when open. Thanks to their construction with sandwich panel and their sealed joints they provide a high level of insulation.



TECHNICAL FEATURES

- Built from 40 mm thick panels made of coated, galvanised double sheet steel filled with expanded polyurethane.
- The panels have steel reinforcing bars at the top and bottom for better fixing of hinges and fittings.
- All hinged joints and ends have flexible seals to ensure perfect closing and a high degree of insulation.
- The ends of the sections have steel profiles on which the adjustable side hinges are fitted.
- Operation by means of torsion springs, drums and cables.
- Steel runners guide the nylon wheels, for quiet, easy opening and closing of the door.
- The vertical shape of the runners depends on the type of lintel in the door (see table).
- Handle for easy manual opening and closing of the door.
- Includes spring and cable break safety measures.
- Complies with the EN- 13241-1 standard.

MODELS BY MATERIALS

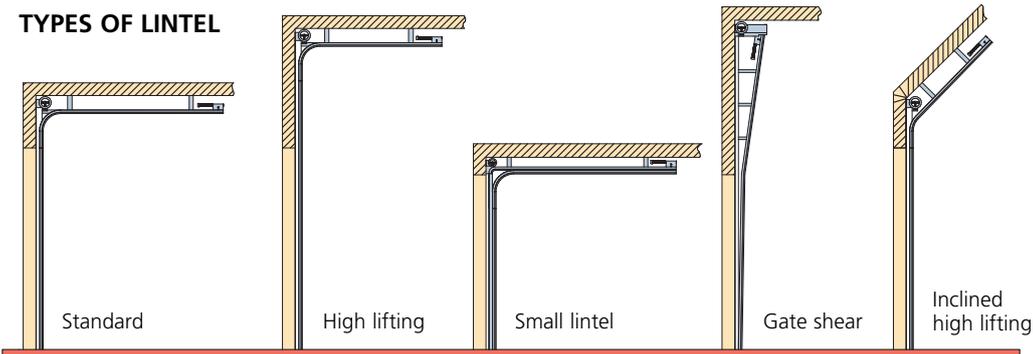
The doors, both panels and fittings, are made from different materials, depending on the risk of corrosion.

	MSSEC-GG	MSSEC-GI	MSSEC-TI
Panels	Galvanised and Coated	Galvanised and Coated	Stainless Steel
Fittings	Galvanised Steel	Stainless Steel	Stainless Steel
Runners	Galvanised Steel	Stainless Steel	Stainless Steel
Springs	Carbon Steel	Carbon Steel	Carbon Steel

SECTIONAL DOOR MEASUREMENTS

All sectional doors are made to measure for the size of the opening and the lintel.

TYPES OF LINTEL



OPTIONS

Subframe for Sectional Door

To improve fixing of runners and torsion springs, a subframe can be supplied.

This is made from galvanised or **STAINLESS** steel.

It includes a tubular internal structure for fixing mechanisms over a refrigerated panel.

Windows

To allow visibility through the door and to let light in.

Motorisation

The door is operated using a motor controlled by a push button.

Bolt

Security lock: this stops the door being opened from the outside if it is not motorised.

Panel Thickness

Standard panels are 40 mm thick, or optionally the sectional door can be made with 80 mm thick panels.

Spring Protection

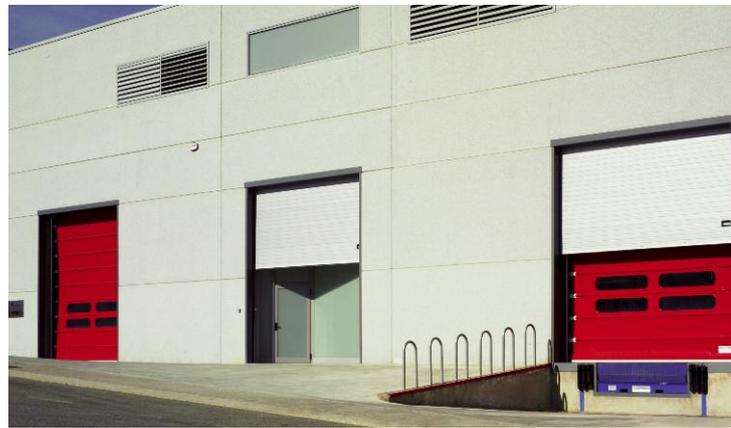
Springs can be protected by a cover made of **STAINLESS** steel.

Bollards/Safety guards

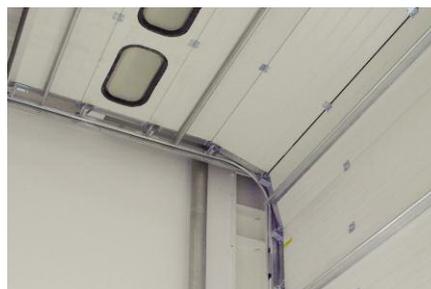
To protect the runners of the sectional door from any impacts.

High speed door

For industries which demand high levels of thermal insulation and hygiene, we recommend installing a QUICKSYSTEM high speed door between the loading dock and the warehouse. Its fast opening and closing reduce air currents to a minimum.



Panels and fittings made in Stainless Steel



Internal reinforcement of the panel



Protection of springs made in Stainless Steel

DOCK SHELTERS

The DOCK SHELTER allows:

- Perfect docking between the dock and the vehicle.
- For a high degree of insulation for thermal and hygiene purposes during loading and unloading. Improved goods handling and working conditions.



Loading Dock with Flexible Shelter

We have a wide range of models available to meet your requirements.

FLEXIBLE DOCK SHELTER

TECHNICAL FEATURES

- This is the most widely-used model, thanks to its RETRACTABLE DOCKING SYSTEM.
- Made with a GALVANISED steel or **STAINLESS** STEEL tubular structure.
- Measurements of the side flaps: 600 mm.
- Measurement of the top flap 1,000 mm.
- Depth 600 mm.
- Side and top flaps made from 3 mm thick plastic.
- Yellow stripes to guide the vehicle into the correct position.
- Reinforced with double polyester fabric inside.
- Outside features anodised aluminium finish.

MODELS BY SIZES

	Outside measurements Width x Height (mm.)	Inside measurements Width x Height (mm.)
MS-FLEX 3030	3000 x 3000	1800 x 2000
MS-FLEX 3434	3400 x 3400	2200 x 2400
MS-FLEX 3444	3400 x 4400	2200 x 3400

Other sizes can be made to order.



FLUSH AGAINST WALL DOCK SHELTER

TECHNICAL FEATURES

- Made with a GALVANISED steel or **STAINLESS STEEL** tubular structure.
- Size of side flaps: 600 mm.
- Size of front flap: 1,000 mm.
- Front and side flaps made of 3mm thick plastic.
- Yellow stripes to guide the vehicle into the correct position.
- Reinforced with double polyester fabric inside.
- Outside features anodised aluminium finish.



Flush Against Wall Dock Shelter

CUSHIONED DOCK SHELTER

TECHNICAL FEATURES

- Shelter made up of 3 cushioned foam-filled flaps on the inside and plastic material on the outside.
- Measurements of side and top cushions: 300 mm wide x 250 mm thick.
- Black with yellow stripes to help guide the vehicle into the correct position.



Cushioned Dock Shelter

INFLATABLE DOCK SHELTER

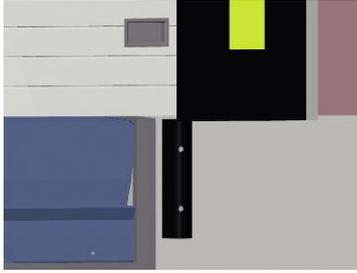
TECHNICAL FEATURES

- Equipped with an inflatable docking system operated by means of a fan.
- Outside features anodised aluminium finish.
- Made of black plastic.
- Structure made of GALVANISED STEEL or **STAINLESS STEEL**.
- Fitted with a single-phase low-pressure fan.



Inflatable Dock Shelter

ACCESSORIES FOR LOADING DOCK SYSTEMS



Rubber Protections

Rubber protection fitted to the front of the loading dock to cushion the impact of the lorry as it docks against the berth.



Metallic Reinforced Protections

Metallic reinforced protections cushion the impact of the lorry. It slides vertically, when ascending or descending the vehicle.



Alignment Barriers

These are to be set into the ground surface outside the loading dock. Helps the lorry to position itself at the dock and avoid impacts. Measurements: 2,500 mm long x 400 outside height. With plates to set them into the ground. Painted in black and yellow stripes to make them easy to see. Made of **STAINLESS STEEL**, **GALVANISED STEEL** or **PAINTED STEEL**.



Loading Dock with Manual Lips

- Operated manually using hinges.
- Made of solid steel with non-slip plating.
- Available in **STAINLESS STEEL**, painted steel or galvanised steel.
- Built in different sections, making manual handling easier and allowing it to be used with different sizes of vehicle.



Aluminium Gangways

- Aluminium gangways to overcome the difference in height between the platform and the vehicle.
- Manually operated, slides sideways on a guide rail.
- Available in different sizes and for different loads.



Loading Dock Fitted to a Metal Chassis

- Makes it possible to install a loading dock without any building work.
- **DOCK LEVELLER WITH HINGED LIP** mounted on a **CHASSIS WITH A SAFETY RAIL**.
 - Made of steel.
 - Measurements: 2,230 x 2,500 x 1,200 mm.
 - With 80 x 40 mm rails.
 - Can include a side walkway.



Loading Dock from Ground Level

Allows a loading dock with a hinged lip dock leveller to be installed in places where there is no step up.

- **DOCK LEVELLER WITH HINGED LIP** mounted on a **METAL STRUCTURE** in the form of a fixed dock leveller, for access from ground level to the vehicle.
- Supports traffic up to 6 tonnes.
- Measurements: 2,230 x 12,000 mm.



Door Opening Safety Microswitches

The safety microswitch stops the dock leveller or lift table from going up if the sectional door on the loading dock is not fully open.

LOADING DOCK SYSTEMS INSTALLATIONS



MS METALSYSTEM reserves the right to alter any of the measurements and features shown in this catalogue without prior notice.



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