MKS

TECHNOLOGY THAT ENHANCES
marksell®

Vertical Dock Leveller

Obtain greater speed, safety and cost reduction during your operations when using our Vertical Dock Leveller

- MKS 6000 PNDEF
- MKS 9000 PNDEF
- MKS 12000 PNDEF
- MKS 5000 PNDMM
- MKS 6000 PNDMM
- MKS 6000 PNDMFA
- MKS 9000 PNDMFA

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Vertical Dock Leveller

> MKS Marksell

MADE IN BRAZIL, FOR THE WORLD

MKS Marksell is a 100% Brazilian company, a pioneer and leader in the specialised area of transportation of cargo and people.

The company is based in self-owned premises in Itapevi, in the Greater São Paulo region. MKS Marksell relies on a flexible production structure installed in an area of 6000 square meters.

MKS Marksell develops, projects and manufactures, using its own technology, equipment for the transportation of cargo and people, either placed on vehicles or stationary, with a great emphasis on hydroelectric activation.

Apart from developing equipment using state-of-the-art technology, MKS Marksell's main objective is to find solutions for your loading and unloading needs.

We listen to your requirements, and based on our wide experience, identify the practical solutions to allow you to solve your operational problems with a high degree of satisfaction.

We are the only Brazilian company that offers a wide range of equipment which will provide the best solution for your needs. We believe that to show our differentials we must do our best and offer these differentials to our customers, allowing them to make their best choice.

So that all this may become reality, we depend on a team of projects and engineering with wide experience and competence, and on the latest state-of-the-art equipment.

We test exclusively all our equipment so that our customers may have, after taking everything into account, the best cost/benefit ratio and that they can be sure of safe and smooth operations.

Performance of MKS Marksell around the World

MKS Marksell is based in São Paulo – Brazil, but the company is present in many countries around the world, especially in Latin America, Europe and Africa.

> Obtain greater speed, safety and cost reduction during your operations when using our Vertical Dock Leveller

The Marksell Vertical Dock Leveller were developed to be used in docks for loading and unloading, acting as a bridge between the concrete dock and the floor of the body of the vehicle, and oscillating in order to compensate for the variation in height of the floor of the body of the vehicle. This allows the access of pallet trucks, forklift trucks and others, in order to obtain greater speed and safety during the process of loading and unloading.

> Advantages

- Optimizes the workforce;
- Increases the speed of loading and unloading without compromising safety.

> Important

You may depend on our Engineering and Commercial Departments to guide you when making the choice of the best solution for your loading and unloading problems.

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Vertical Dock Leveller

> MKS PND EF (Hydraulic)

This model is for frontal installation on the dock, either fixed with screws with metal plugs or soldered on with clamps. It is widely used in sites in which the concrete dock has already been installed, therefore avoiding additional work in preparing the recess.
Activation is with a hydraulic cylinder for elevation/tilting with a hydraulic unit and a low consumption electric motor, and which is button operated. It is usually installed in the external part of the building, and therefore avoids occupying any useful covered areas during the operation.
It is ideal for combustion forklift trucks, pallet trucks (mechanical and electric) and hand carts.

Models	Traffic Cargo Capacity [kg]	Cargo Capacity per Axle (Leaning on) [kg]	Length of Plate [mm]	Width of Plate [mm]
MKS 6000 PND EF	6000	3000	2000 / 2500 / 3000	2000
MKS 9000 PND EF	9000	4500	2000 / 2500 / 3000	2000
MKS 12000 PND EF	12000	6000	2000 / 2500 / 3000	2000

> MKS PND MM (Mechanical)

This model is for frontal installation on the dock, fixed with screws with metal plugs. It is widely used in sites in which the concrete dock has already been installed, therefore avoiding additional work in preparing the recess.
Activation is by mechanical/manual tilting and elevation, with a steel cable system and handle; its movement is aided by a set of gas springs (cylinder actuators).
It enjoys an excellent cost/benefit ratio, allowing for the speedy and safe operating of truck pallets (electrical or mechanical) or hand trucks.

Models	Traffic Cargo Capacity [kg]	Cargo Capacity per Axle (Leaning on) [kg]	Length of Plate [mm]	Width of Plate [mm]
MKS 5000 PND MM	5000	2500	1200	2000
MKS 5000 PND MM	5000	2500	1700	2000
MKS 6000 PND MM	6000	3000	2000	2000

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Vertical Dock Leveller

> MKS PND MFA (Mechanical Articuladed)

This model is for frontal installation on the dock, fixed with screws with metal plugs. It is widely used in sites in which the concrete dock has already been installed, therefore avoiding additional work for preparing the recess.
Activation is by manual/mechanical tilting and elevation, with a handle system; its movement is aided by a set of helical springs.

This is a patented system that has an articulated plate, of a flange type, with a rotational movement that allows the vehicle to park on to the dock before the equipment is put into operation on the floor of the body of the vehicle.
This model is widely used when there is only a small variation in the height between the dock and the floor of the body of the vehicle.

Models	Traffic Cargo Capacity [kg]	Cargo Capacity per Axle (Leaning on) [kg]	Length of Plate [mm]	Width of Plate [mm]
MKS 6000 PND MFA	6000	3000	1000	1850
MKS 9000 PND MFA	9000	4500	700	1850

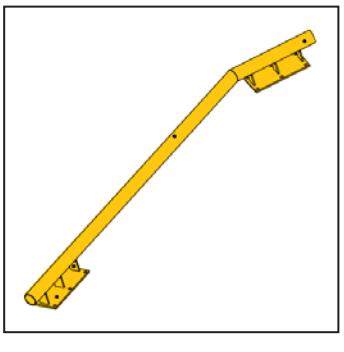
> Accessories and Optionals

In order to obtain more details, please contact our sales team.

Lamp for the dock, with an articulated arm and reflector

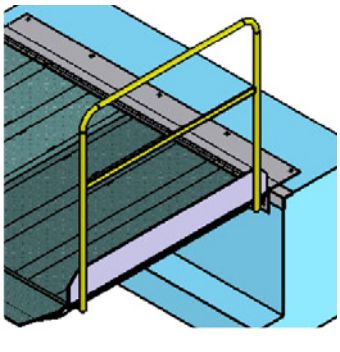
Wheel Blocks

Operational Sound Alarm (linked to the main switch)



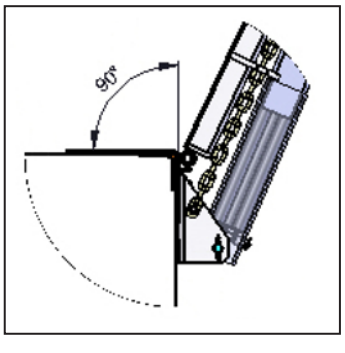
Wheel Guide for Positioning

A side skirting-board for the plate, with a height of 150mm



A frame protector with a height of 1200mm

Button Control (patented product)



Anti-shock Limiter Device (patented product)

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> General information

The Marksell Vertical Dock Leveller were developed for loading and unloading in dock, acting as a bridge between the concrete dock and the floor of the body of the vehicle, allowing oscillation to compensate for the variation in height of the floor of the body of the vehicle during the operation, permitting the access of hand trucks, pallet trucks, forklift trucks and others, both speeding up and making the operation of loading and unloading much safer.
We give below the recommendations for use in loading the MKS Marksell Dock Leveller providing the limits of inclination, that is to say, the maximum unevenness advisable between the floor of the dock and the floor of the body of the vehicle, positive or negative, which are to be respected in the use and application of the equipment.

Operations	Inclination [%]	Inclination [degrees]
Manual Operation	5	2,85
Operation with pallet trucks	7	4,00
Operation with electric forklift	10	5,75
Operation with combustion forklift	12,5	7,10

It is fundamental to follow these recommendations to guarantee the safety of the operation of loading and unloading, including that of the operator, apart from preserving the MKS Marksell Dock Levellers and the equipment used in this operation.

You may rely on our Engineering and Commercial Departments to guide you in your choice of the best operational equipment for the solution to your loading and unloading problems on your dock.

> Colours

Finishing Background in BLACK (standard)

Synthetic Primer LIGHT GREY

Extra-quick synthetic enamel ROYAL BLUE

Enamel OPALESCENT GREY

Synthetic Enamel MKS YELLOW

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