MKS

TECHNOLOGY THAT ENHANCES marksell®

Tail Lifts

Increase your revenue, optimize your workforce, and guarantee safety in loading and unloading!

MKS 400PTE	MKS 500P3E	MKS 600P2E
STEEL	STEEL	STEEL

MKS 1200P4E	MKS 2200P4E
STEEL AND ALUMINUM	STEEL AND ALUMINUM

MKS 2200PRE	MKS 2500P4E
STEEL AND ALUMINUM	STEEL AND ALUMINUM

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> 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.

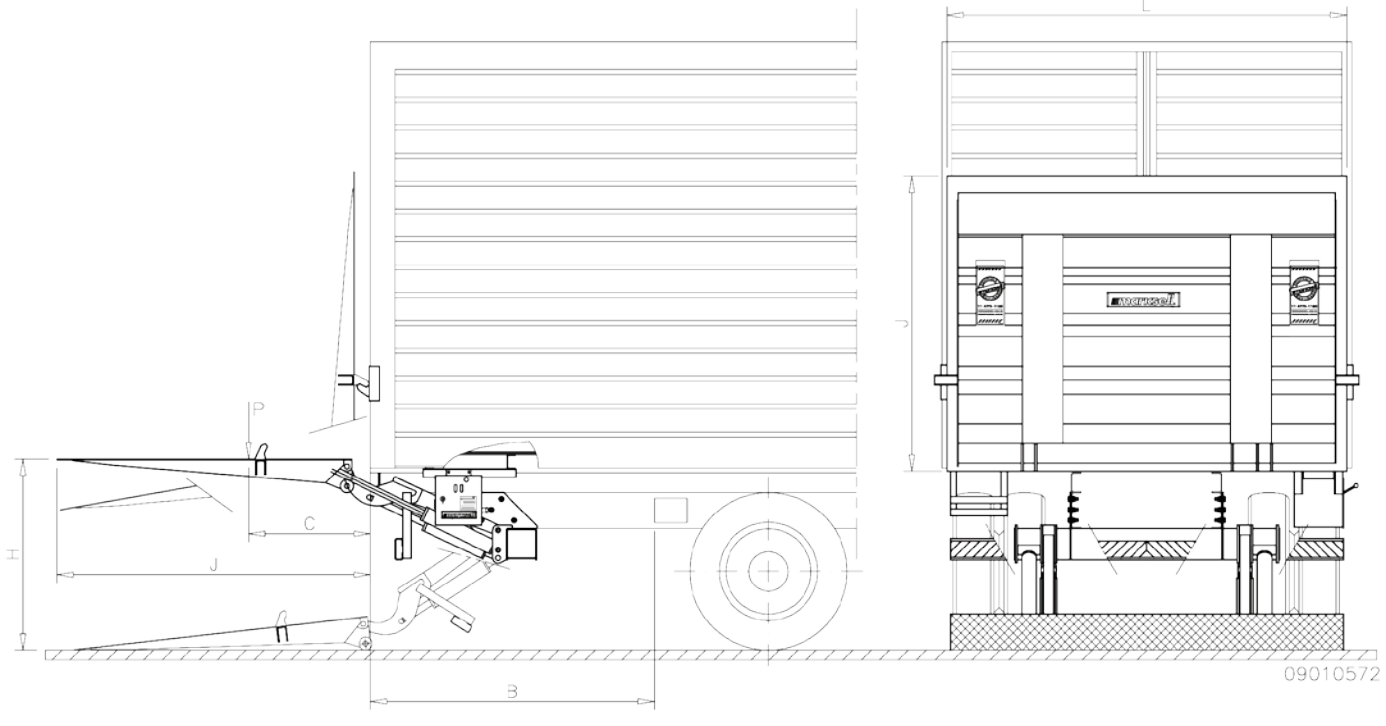
So that all this may become reality, we depend on a team of projects and engineering with wide experience and competence, and on the latest state-of-the-art equipment.

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.

Diagram of installation of equipment



Models	Max. Cargo (P) [kg]	Centre of Max. Cargo (C) [mm]	Max. Elevating Height (H) [mm]	Width of Plate (L) [mm]	Length of Plate (J) [mm]	Peso Proprio [kg]	Min. PBT [kg]	Rear Space (B) [mm]	Traffic Capa-city [kg]
MKS 400 PTE	400	400	850	1000	1000	190	3000	-	-
MKS 500 P3E	500	600	1000	1600	1500	240	3000	650	-
MKS 600 P2E	600	600	1300	2000	1500	350	5000	900	1000
MKS 1200 P4E	1200	600	1300	2000	1500	420	7000	850	2000
MKS 1200 P4Ea	1200	600	1300	2000	1500	315	7000	850	2000
MKS 2200 P4E	2200	600	1500	2500	1800	550	11000	1000	3000
MKS 2200 P4Ea	2200	600	1500	2500	1800	385	11000	1000	3000
MKS 2200 PRE	2200	600	1500	2500	1800	650	11000	1980	-
MKS 2200 PREa	2200	600	1500	2500	1800	500	11000	1980	-
MKS 2500 P4E	2500	1000	1500	2500	2000	760	15000	1100	3000

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Tail Lifts

> General Technical Characteristics

• It allows the operation of loading and unloading to be done by one operator, who can be the driver, working in complete safety with palletized cargoes, unitized, and alternating hand carts;
• Installation can be made on the rear of trucks in general, trailers and semi-trailers;
• Activation is by means of hydroelectric units, 12 or 24VCC, connected to the original electrical system of the vehicle; the characteristics are improved performance and a lower consumption of energy;
• Functioning is by means of hydraulic cylinders, for the elevation and inclination of the Plate, built with cases of seamless drawn steel tubes, polished, and with rectified rods having a coat of hard chrome, which result in greater durability of hydraulic sealing;
• Cam control block, with a safety valve which avoids the elevating operation when there is excess weight;
• Operational speed is 0.1 m/s, in accordance with international standards;
• It does not weigh much, and therefore has very little effect on the cargo capacity of the vehicle;
• The plate has a triangular structural profile, totally soldered, which permits a greater traffic capacity, having less weight and greater resistance to corrosion.

> Tail Lifts – Standard Models

• It has a compact, high performance hydroelectric unit, holding the reserve of hydraulic oil, motor pump set. Control is by means of a simple fixed, or double fixed, button command, or by using removable command levers;
• It is fixed on to the chassis of the vehicle or the auxiliary frame of the body of the vehicle by means of screw studs, using a universal system adaptable to the various gauges of the chassis, having a maximum external width of 1000mm and a minimum of 850mm;
• A set of frame and external hydraulic cylinders for the chassis if the vehicle, which avoids the eventual removal of the bars;
• A bumper system incorporated on to the equipment;
• An exclusive method of locking the plate in the position of transport, which makes unauthorized use of the equipment difficult; it aligns the plate automatically. Lowers the noise factor, and protects the body of the vehicle;
• An optional system for locking the wheels of the hand carts, developed to cater for specific operational needs;
• Articulations with plugs made of synthetic materials which increase durability and result in a low coefficient of friction.
• A system of superior mechanical end of course, fitted on to the structure of the body of the vehicle, which guarantees operational alignment with maximum cargo.
• A frame with a new profile, which minimizes cutting or making modifications to the rear frame of the body of the vehicle;
• A standard plate with the floor in corrugated plates, with lines (crow's feet type) to make it non-skid;
• General support with design bearings, which helps assembly and maintenance, apart from improving the geometrics of the set;
• Hydraulic cylinders with design and a system of sealing, and greater durability.

> Optionals

• A system of mechanical locking of the elevating set, for loading from docks;
• Removable side wing for loading/unloading from the sides of the plate;
• A special set of cables/coupling for installing on semi-trailers;
• A plate type door with a support set and rubber sealing;
• Valves to prevent rupture of the hoses;
• An additional hydroelectric unit, activated with a motor using 200v alternated current – single-phase;
• Special devices for fitting cargo on to the plate;
• Plates with special dimensions;
• System for locking the wheels of the handcarts on the plate;

> More on Marksell

hydraulic oil MKS BLUE PREMIUM

THE PREMIUM OIL FOR YOUR MARKSELL EQUIPMENT.

SPARE PARTS COUNTER TECHNOLOGY THAT ENHANCES marksell

ORIGINAL SPARE PARTS WITH THE BEST PRICES IN THE MARKET.

EXPRESS 24 hours marksell MKS SERVICE

ONLY MARKSELL CAN PROVIDE A 24-HOUR MAINTENANCE SERVICE.

ADPLAT

ADVERTISE YOUR COMPANY. GET TO KNOW ADPLAT.

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Tail Lifts

> MKS 400 PTE

This equipment has been developed and manufactured for transporters that use van-type vehicles or storage trailers and require that the equipment be installed in the internal part of the vehicle and having a cargo capacity of 400kg. The own weight of the MKS 400 PTE is approximately 190kg, and it works equally well for cargo or for accessibility.

Technical Characteristics:

- **Plate Measurements:** 1000x1000mm
- **Cargo Capacity:** 400kg per 400mm
- **Hydraulic Cylinders:** 1 (elevation/inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**

> MKS 500 P3E

Developed and manufactured for the more demanding transporters. It has an own weight of approximately **237kg**, and offers both lightness and sturdiness at the same time. It uses all the components of the most famous and most used of MKS Marksell line of production, the P4E.

Technical Characteristics:

- **Plate Measurements:** 1600x1500mm
- **Cargo Capacity:** 500kg per 600mm
- **Hydraulic Cylinders:** 3 units (2 elevation and 1 inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**

> MKS 600 P2E

Developed for transporters who prefer using platess of greater dimensions, it offers a larger surface area for cargo, and handling space for the workers. It has an own weight of approximately 300kg, and offers time, space, sturdiness and lightness all at the same time. It uses all the components of the most famous and most used of MKS Maksell's line of production, the P4E.

Technical Characteristics:

- **Plate Measurements:** 2000x1500mm (an optional length of 900mm available)
- **Cargo Capacity:** 600kg per 600mm
- **Hydraulic Cylinders:** 2 units (1 elevation and 1 inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**
- **Optional: Side guards may be requested for fastening the cylinders**

Important: Whatever the model of the body of the vehicle (open, sider or wagon), semi-trailer (carts) or chassis, the tails lifts can be easily installed requiring only a few minor adjustments at the time of installation.

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Tail Lifts

> MKS 1200 P4E (STEEL AND ALUMINUM)

Developed and manufactured for transporters who prefer a longer plate. Ideal for transporters who load and unload palletized cargoes frequently. Having an own weight of approximately 450kg, it is one of the strongest and most hard-wearing pieces of equipment on the market.

Technical Characteristics:

- **Plate measurement:** 2100x1800mm
- **Cargo Capacity:** 1200kg per 600mm
- **Hydraulic Cylinders:** 4 units (2 elevation and 2 inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**

> MKS 2200 PRE (STEEL AND ALUMINUM)

The Tail Lift MKS 2200 PRE is the option for who wishes to open the doors to the trunk without tilting the tail lift. In the transporting position it remains on the chassis of the vehicle, leaving access free by the back of the assemblage, allowing the handling of the cargo without interfering with the equipment, and enabling the vehicle to park next to the dock for loading and unloading.

Technical Characteristics:

- **Plate Measurement:** 2500x1800mm
- **Cargo Capacity:** 1500kg per 600mm
- **Hydraulic Cylinders:** 5 (2 for elevation, 2 for inclination and 1 cylinder for moving the plate)
- Exclusive Hydroelectric Unit
- **Activation by button-control (standard) or lever (optional)**

> MKS 2200 P4E (STEEL AND ALUMINUM)

This is the equipment which brought fame to MKS Marksell and defined the standards for equipment which came later. It is developed and manufactured for the most demanding transporters in the market. Having an own weight of only 550kg (steel) and 385 (aluminum), it offers an elevating force of 2200kg per 600mm. You only need to be on the roads to see the P4E on trucks in the traffic. It enjoys national preference because of its trustworthiness and because of its durability.

Technical Characteristics:

- **Plate Measurement:** 2500x1800mm
- **Cargo Capacity:** 2200kg per 600mm
- **Hydraulic Cylinders:** 4 units (2 elevation and 2 inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**

TECHNOLOGY THAT ENHANCES marksell®

Tail Lifts

> MKS 2500 P4E

Based on the 2200 P4E line of production, the 2500 P4E surpasses it in strength and capacity, without ignoring the durability and profitability which has turned the 2200 P4E into the best-selling equipment in Brazil in recent years. Having a bigger standard plate (a length of 2000mm), it has been developed with bearings and cylinders of greater dimensions, with the objective of allowing the customer to obtain greater profitability in his operations.

Technical characteristics:

- **Plate Measurement:** 2500x2000mm
- **Cargo Capacity:** 2500kg per 1000mm
- **Hydraulic Cylinders:** 4 units (2 elevation and 2 inclination)
- **Exclusive Hydroelectric Unit**
- **Activation by button-control (standard) or lever (optional)**

Important: Whatever the model of the body of the vehicle (open, sider or wagon), semi-trailer (carts) or chassis, the tail lifts can be easily installed requiring only a few minor adjustments at the time of installation.

> More solutions

For Passenger Lifts

We guarantee accessibility on vehicles, for people that are physically disabled or of reduced mobility in a safe, effective and efficient way!

For Gas Bottle Distribution

If you are looking for award-winning equipment and that is tailor-made for gas bottle distribution, then you are in the right place!

Vehicular Cranes

Lightweight Vehicular Cranes, safe and efficient, for the handling of cargo of up to 2000kg.

> Adplat

Adplat is a product developed by the **New View Media** developed exclusively for **MKS Marksell** with the purpose of offering the transporter a new means of communication.

MKS Maksell available to all its existing and future customers, on an exclusive basis, a new way of making known and developing their brand name and services offered.

It is our understanding that as the **MKS Marksell** customer is always focused on the logistics of his business, he can miss out on the opportunity of communicating with the marketplace in general. Because of this **New View Media** created a strategic space on the **MKS Marksell** tail lifts to enable the customer to communicate with the public.

Adplat is a means of communication for transporters wishing to use the open air media, due to its high impact on consumers, to obtain regional or total urban coverage. Furthermore it enjoys a favourable cost/benefit ratio relating to the advertising of products, brand names or services.

> Brand names that can be seen on MKS Marksell Tail Lifts

Coca-Cola

Kalunga

CONSIGAZ
A CHAMA QUE FAZ SUA VIDA MELHOR.

new view media
Novos Caminhos

MB MARTIN BROWER

JSL
Entender para Atender

Carrefour

JADE

Pão de Açúcar

MARINHA DO BRASIL

IVECO

sonda Supermercados

> MKS Marksell Exclusivity

MKS Marksell develops equipment, devices and exclusive systems in order to allow you to obtain the best performance, as well as thinking about your safety. Check these following instances:

• Patented MKS 200PEG equipment, developed together with Ultragas, with the objective of carrying out the loading and unloading of Gas Bottle Distribution.

• Patented anti-shock devices for frontal levellers that have the purpose of protecting your equipment and making it long-lasting.

• BTS System, Built to Suit Dock Levellers, developed with the objective of reducing in up to 50% your initial investment in dock levellers.

• The new MKS Marksell Button Control has extra low voltage, an alert visor diagnosing any problems with the equipment, and conforms to all the demands of regulation *NR10* and *CE* from now on. All models of MKS Marksell Hydraulic Dock Levellers will have as a differential button controls which are in accordance with the standards laid down by nr10 (*Regulatory Norm 10 – Safety in Electrical Installations and Services*) and ce. you will benefit from a smart service with a touch membrane, a smart service warning any failures, and a preventive maintenance timer.

• The ADPLAT product, designed for tail lifts – It is our understanding that because MKS Marksell customers are always focused on the logistics of their operations, they lack a space dedicated to communicating with the market in general. As a result, MKS Marksell, together with New View Media, has created a strategic area on the MKS Marksell tail lifts, to enable you to communicate with the public, within a standard space, and which can be easily substituted.

> More on Marksell

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