



**DOCK  
LEVELLER**

# INTRO

DOCK LEVELLER, a hydraulic platform specifically designed for installation at loading docks within warehouses and distribution centers. Its primary function is to bridge the height differential between the dock and truck beds, enabling safe and efficient loading and unloading operations. The leveller's design accommodates various vehicle heights, enhancing work flow and reducing potential hazards.

By incorporating a dock leveller into loading operations, organizations can achieve several benefits: operational efficiency, safety enhancements, reduced equipment damage and lower injury risks.

Overall, the implementation of dock levellers contributes to optimized logistics operations and is crucial for maintaining safety standards in industrial environments.







## Structure

The mechanical platform is the physical structure that bridges the gap between the warehouse floor and truck bed, it included deck, lip, and hinge assembly.

The lip extends outward to rest on the truck bed, allowing smooth loading and unloading activities.



## Hydraulic

The hydraulic system provides the lifting and lowering mechanism for the dock leveller. It consist of hydraulic pump, electric motor, cylinder and hoses.

When activated, the hydraulic pump pressurises the hydraulic fluid, causing the cylinder extend, this movement raises or lowers the platform to match the truck bed height.



## Electrical

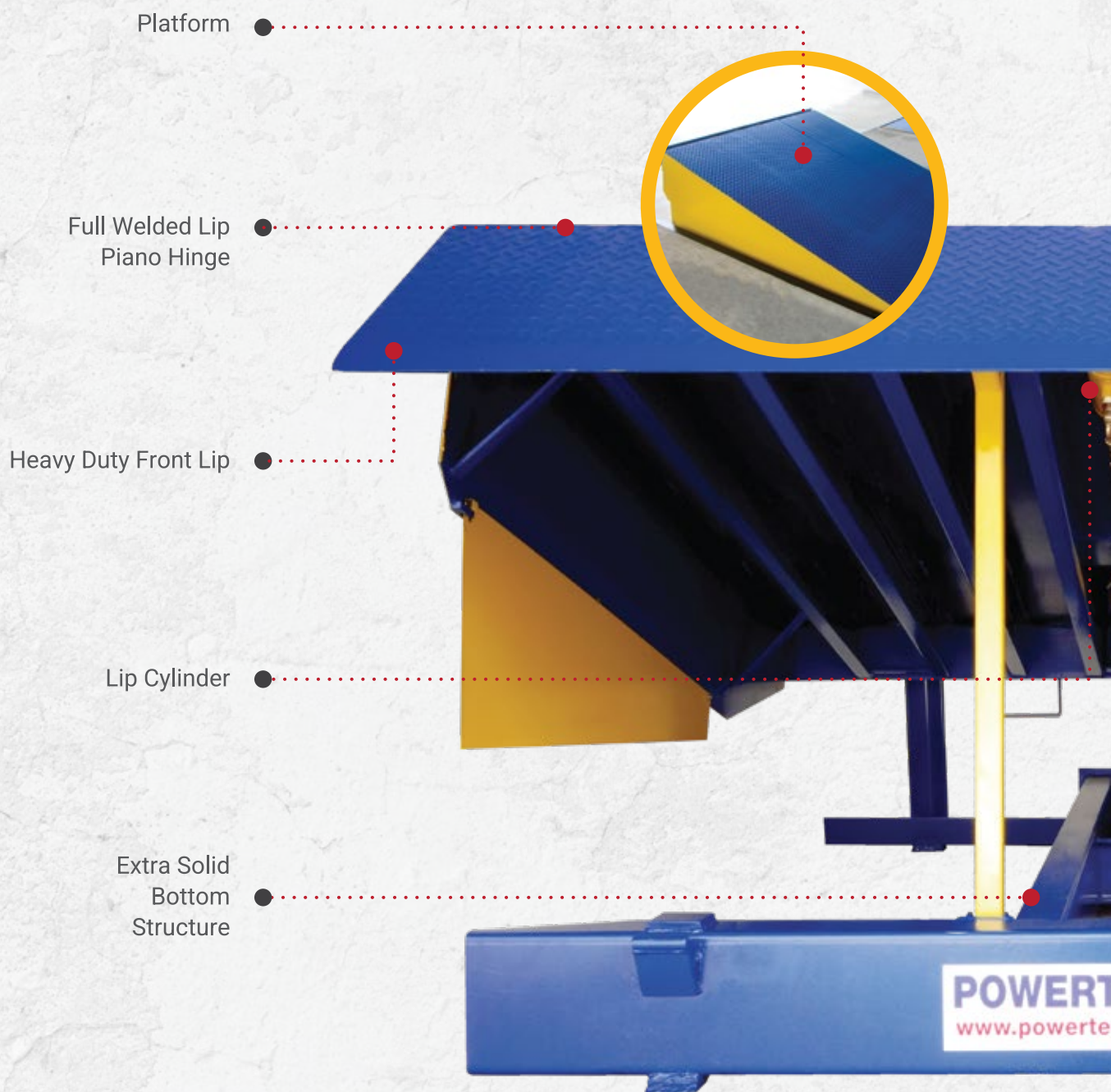
The electrical system control the overall operation of the dock leveller, it includes component such as MCB, limit switch and control panels.

This electrical elements manage safety features, positioning, and auto return system.

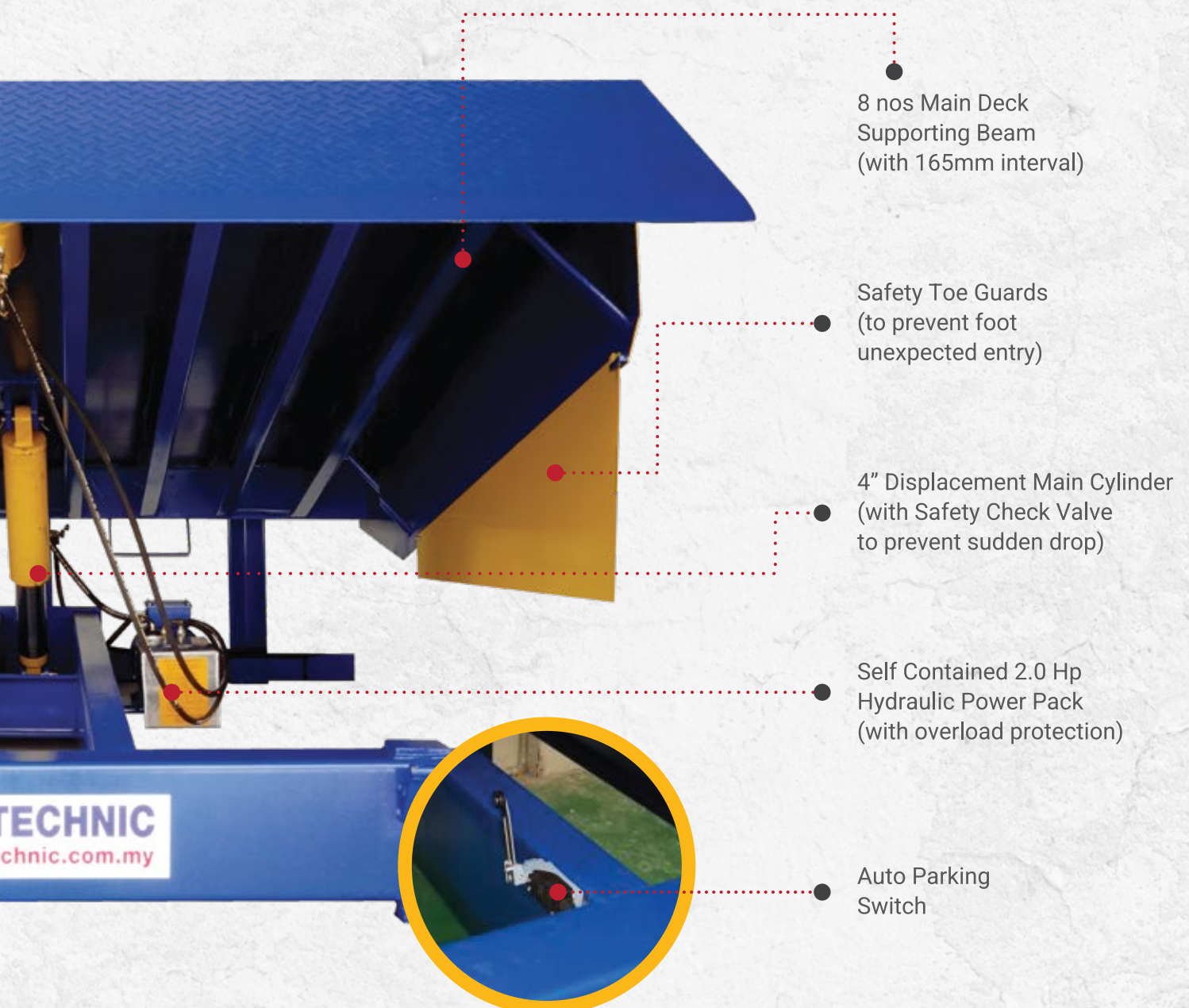




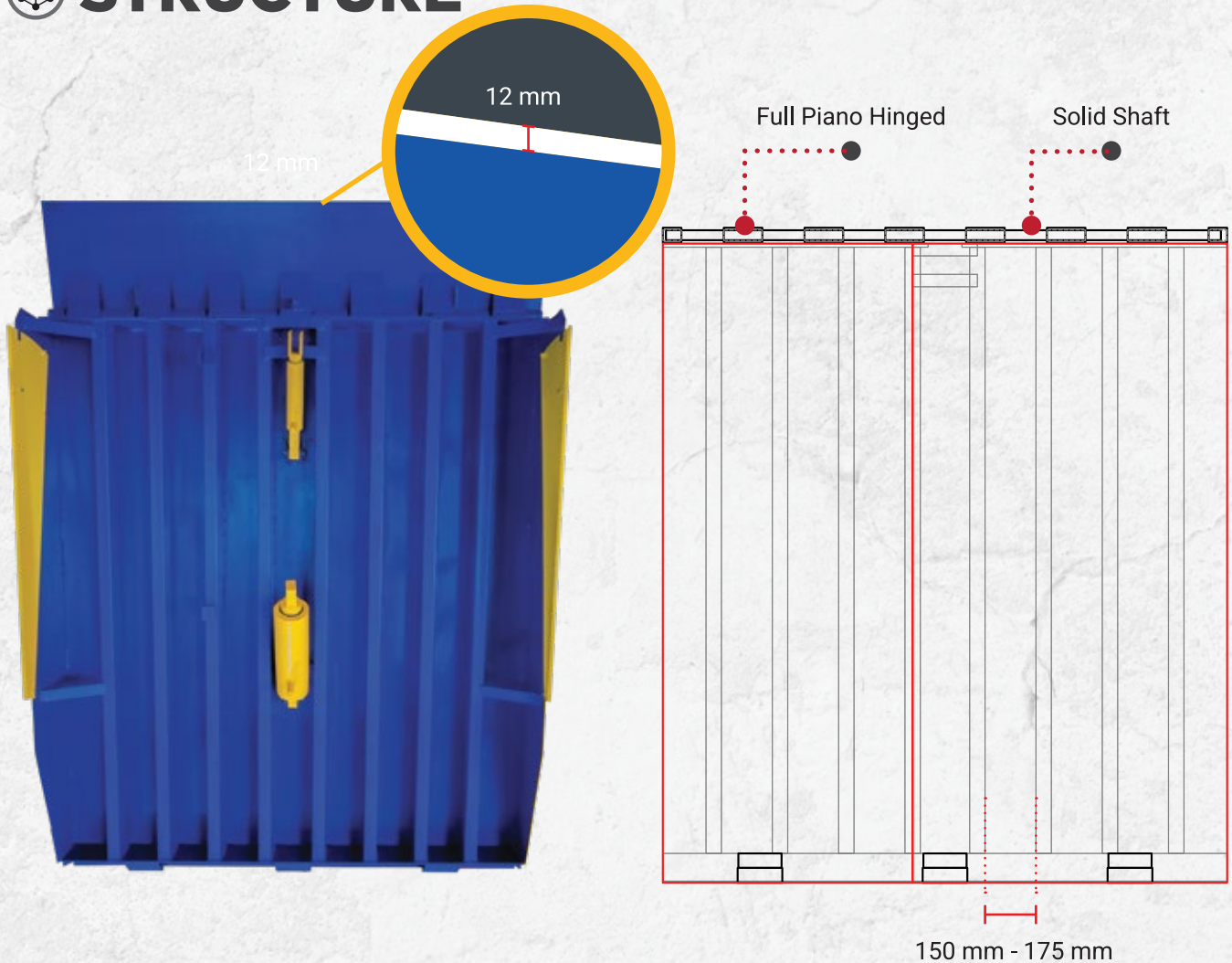
# MAIN COMPONENTS



Scan  
to view



## STRUCTURE



### Heavy Duty Lips 50 mm

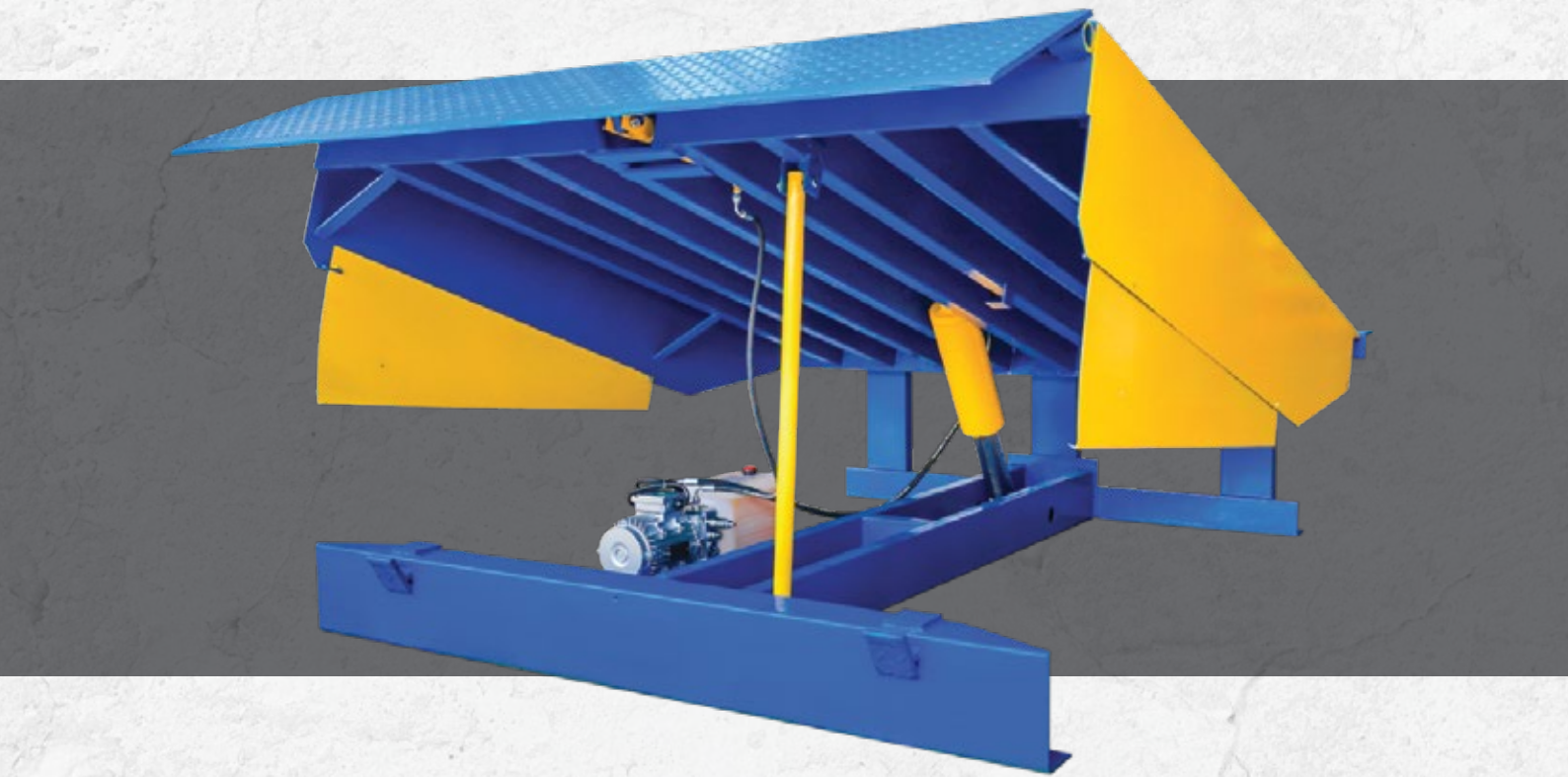
12mm thickness lip on dock leveller serve a critical purpose in ensuring safe and efficient loading and unloading operation.

### Rigid Platform

150mm gap platform : typically constructed with high tensile steel for durability and strength to withstand heavy load.

### Solid Piano Hinge

Continuous hinges that run the full width of the dock leveller platform, connecting the platform to the lip, compared to traditional multi-point hinges, piano hinges require less maintenance and offer better alignment over time. It provides smooth movement when the lip deploys and retracts, minimizing friction and the chance of mechanical jamming.



### **Sufficient Toe Guard**

It is on the side of dock leveller to prevent worker's toes from getting caught underneath the deck during loading and unloading operation.

### **Rigid Support Structure**

Strong support frame provides stability and load-bearing capacity for the entire dock leveller, it ensures that the platform remains secure during loading and unloading activities.

### **Rigid Base Beam**

Main base beam allow the cylinder to take the load when auto burst valve is activated.

### **Maintenance Bar**

It is placed across the platform of the dock leveller, it prevents accidental lowering of the dock leveller while maintenance is in progress.

## **HYDRAULIC**

### **Powerpack**

2 HP powerpack, ensure reliable performance and safety for dock leveller .

### **Low Operating Pressure**

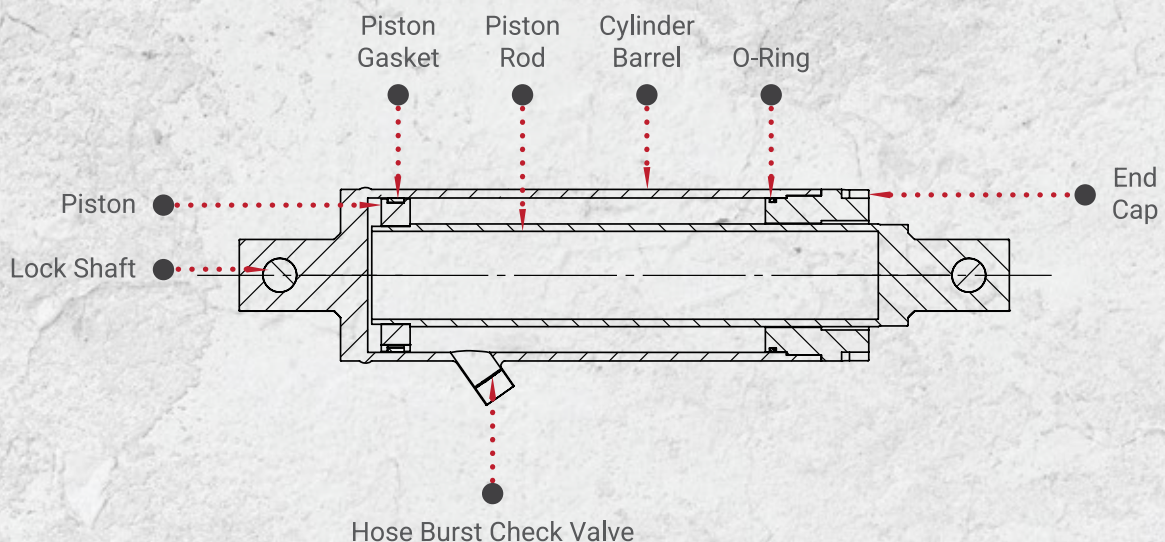
500psi low-pressure system to ensure powerpack long working life, also put less stress on seals, hose and others components

### **Pump Overload Protection**

Safety feature designed to prevent damage to oil pumps by detecting and responding to conditions that could cause the motor or pump system to exceed its designed capacity. This feature is essential in dock leveller to ensure reliability, minimize downtime, and extend the life of the equipment.

### **Cylinder with Hose Burst Check Valve**

100mm bore cylinder is engineered to maintain optimal operation at 500 psi, ensuring extended component life span and minimized maintenance costs. The cylinder is integrated with a hose burst check valve, a critical safety feature designed to hold the platform securely in place. This valve activates automatically if the truck prematurely departs from the dock leveller, preventing unintended movement of the platform and ensuring operational safety.



## ELECTRICAL

### Full Auto Operating System


Powertechnic dock leveller is engineered with a fully automated operation system, allowing for seamless control via a single push button. This design facilitates the lifting of the platform and the extension of the lip with minimal user intervention, enhancing operational efficiency and user convenience.

### Auto Return System

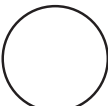
The auto return system designed to ensure that the dock leveller platform consistently returns to a neutral position after each use. This feature is critical for maintaining safety for both forklift operators and workers in the vicinity, by ensuring that the platform remains in a stable, neutral position, the system reduces the likelihood of accidents, thereby protecting personnel and equipment from potential hazards associated with unintentional movement.

### Low Control Voltage

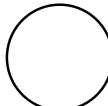
Designed with low operating voltage systems enhance safety and efficiency in industrial applications. Operating at lower voltages reduces the risk of electrical hazards and allows for safer operation in environments where moisture or other hazardous conditions may be present.





MODEL : PR2A  
PRACTICAL SWL  
**6.5ton**



ON / OFF



START





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Website

**OPERATION :**

1. Ensure the truck is parked properly, and aligned with the PHE Dock Leveller.
2. Ensure the door is fully opened.
3. Turn the selector switch to "**ON**" position.
4. Press and hold the "**START**" button to raised up the platform. Lip will open automatically when platform reach the maximum position.
5. Released the "**START**" button when the lip was fully opened. PHE Dock Leveller will fall automatically until the lip rest on the truck.
6. PHE Dock Leveller will return to home position automatically upon truck departure.



**Caution:**

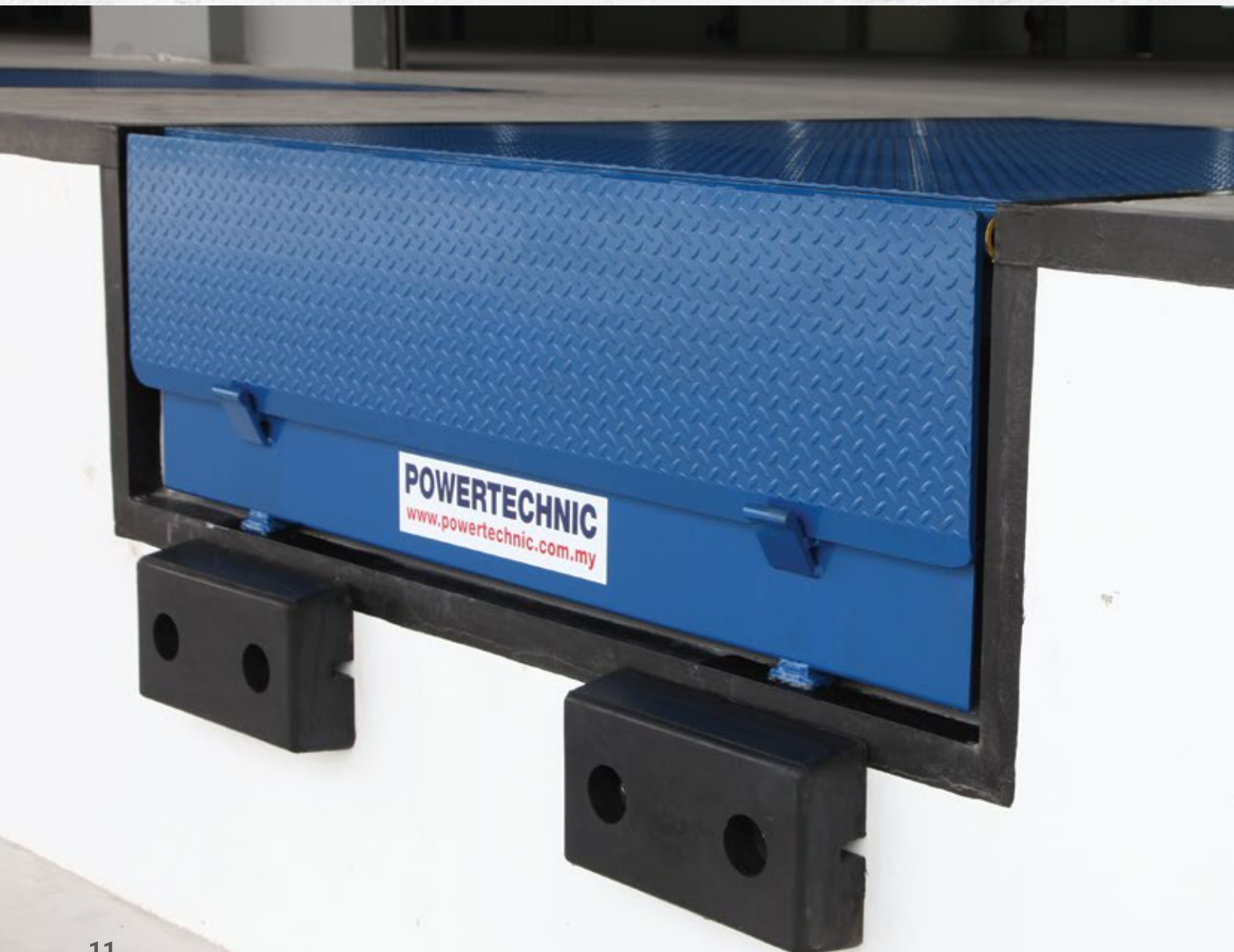
Use by untrained people can cause serious personal injury and property damage. Read complete **operation instructions**. Do not operate the PHE Dock Leveller if it looks broken, or does not seem to work right. Contact your dealer for checking.

**HOTLINE :**  
**07-660 7007**

# ACCESSORIES

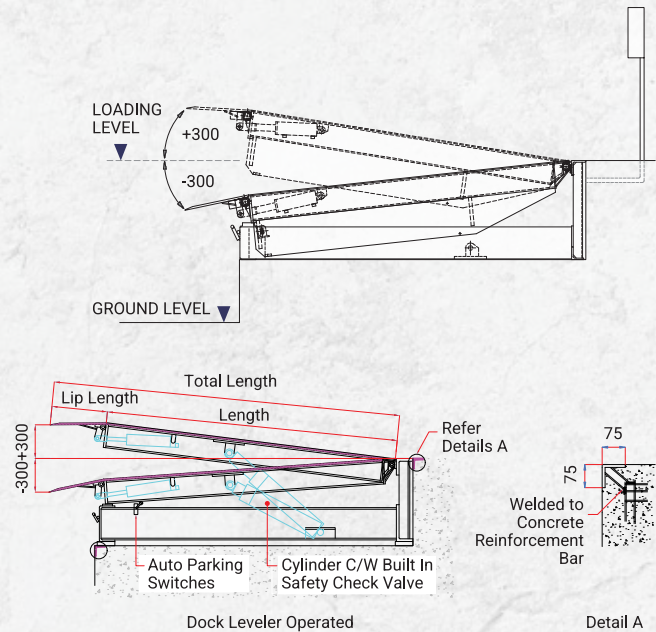
## Rubber Bumper

Rubber bumpers for dock levellers are essential components used to protect both loading docks and vehicles during the loading and unloading process, our rubber bumper covers larger areas, offering more comprehensive protection.

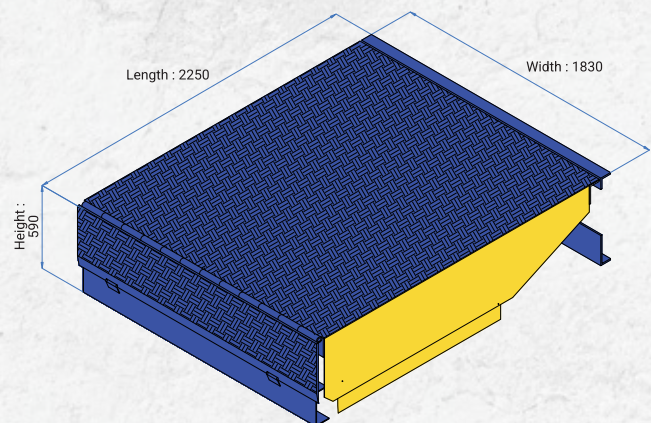
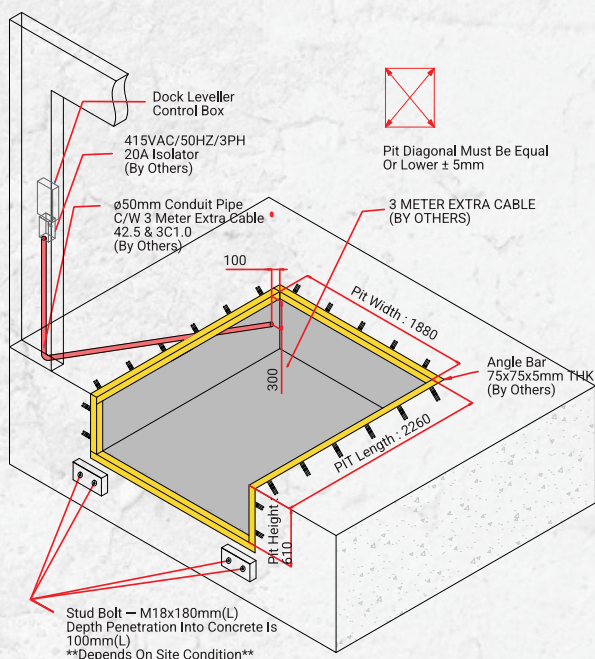


# DOCK LEVELLER STANDARD SIZE

Platform Size	: 1830(W) x 2250(L) x 590(H) mm
Pit Size Request	: 1880(W) x 2260(L) x 610(H) mm
Lip Length	: 406 mm
With Lip Extended	: 2656 mm
Static Capacity	: 13,600 kgs
Dynamic Capacity	: 6,500 kgs
Level of Balance	: +300mm / -300mm
Collapsed Height	: 590 mm
Main Deck Material	: 6mm Mild Steel Chequered Plate
Rubber Bumper	: Inclusive 2 units as standard



Dock Leveller Dimensions							Pit Dimensions		
Model	Capacity	Length	Width	Height	Lip Length	Total Length	Length	Width	Depth
DLP-590-2218	13.6	2250	1830	590	406	2656	2260	1880	610
DLP-590-2215	13.6	2250	1530	590	406	2656	2260	1580	610
DLP-590-2418	13.6	2400	1830	590	406	2806	2410	1880	610
DLP-590-2418	13.6	2400	1530	590	406	2806	2410	1580	610
DLP-490-2218	13.6	2250	1830	490	406	2656	2260	1880	510
DLP-490-2418	13.6	2400	1830	490	406	2806	2410	1880	510

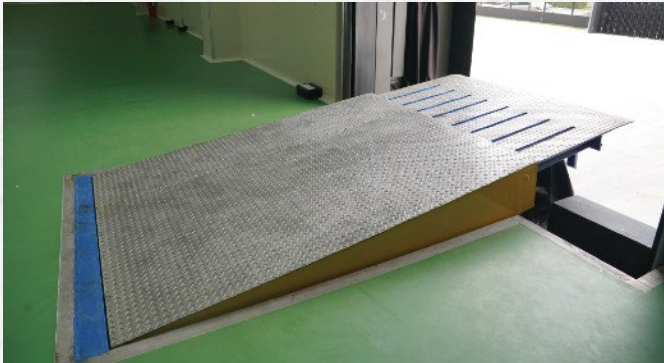


# TELESCOPIC DOCK LEVELLER

A telescopic dock leveller is a type of adjustable platform used in loading docks to connect a warehouse floor with the bed of trucks. Unlike standard hinged-lip dock levellers, the telescopic version has an extendable lip that can be precisely positioned, offering more flexibility during loading and unloading operations.

This type of dock leveller frequently used for cold storage facility, minimize the open space between the vehicle and the dock to maintain consistent temperatures.

By installing a telescopic dock leveller, the sectional door can seal the entire entrance more effectively. This helps fully isolate indoor air conditioning and makes it harder for outside dust to enter.



Dock Leveller Dimensions							Pit Dimensions		
Model	Capacity	Length	Width	Height	Lip Length	Total Length	Length	Width	Depth
DLTP-590-2520	13.6	2560	2000	590	1000	3560	2570	2050	610
DLTP-590-2518	13.6	2560	1830	590	1000	3560	2570	1880	610

# DOCK SHELTER

Used for seal between dock and trucks. It can protect goods and avoid pollution of exterior air and dust during the loading and unloading process.



## Mechanical Dock Shelter

Powertechnik dock shelter is engineered with a fully automated operation system, allowing for seamless control via a single push button. This design facilitates the lifting of the platform and the extension of the lip with minimal user intervention, enhancing operational efficiency and user convenience.



## Sponge Dock Shelter

Fit for docks working with uniform trucks. It can realize effective seal and thermal insulation.

- Color : Black
- Qty Of Fabric Layers : 2
- Fabric Type : Horizontal Polyester
- Surface Material : PVC Fabric
- Basic Material : PVC Fabric
- Thickness Of Front Fabri : 3.0 mm
- Density : 2.7 KG/m<sup>2</sup>
- Thickness Of Lateral Fabric : 0.8 mm
- Retractable Metal Frame : Zinc Steel/Aluminum Alloy
- Tear Strength : 150 N/mm
- 1% Stress : 8 N/mm
- Max Width : 5 m
- Work Temperature : -20/+80 °C
- Horizontal Stability : Yes
- Fireproof Grade : EU Grade II

## Structure and Sponge

The back structure is made from galvanized steel plate or anti-cor-ro-sive solid wood, touching with the wall closely. Inside is filled with highly compressed sponge, with density of 30KG/m<sup>3</sup>. Size of section: 300mm x 300mm. Special pressure-relief design can reduce the friction with dock and trucks. This will prolong work life of surface fabric.

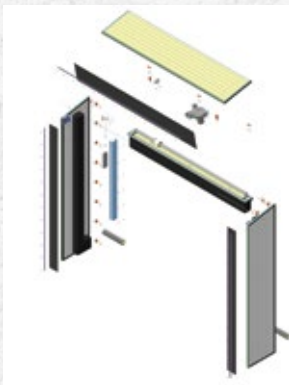
## Surface Fabric

Made from PVC fabric with self-extinguishing function. Weight: 800g/m<sup>2</sup>. There are fabric shutter folds on top beam and two side columns. Thus it can endure long-time friction and squeezing.



## Inflatable Dock Shelter

Two sides and top part are PVC fabric material airbag. When working, the automatic air pump blow air into the joined air bags, to fill the space between door and truck containers. Inflatable dock shelter adapts accurately to various size of lorry. It offers excellent sealing properties and for the most part prevents outdoor temperature reaching warehouse. Thus it is fit for areas with high demand for both thermal insulation and air-tightness, like food and pharmaceutical warehouses.



## Roof and Side Cladding

Thermal insulated steel sandwich panels, 40mm thick, with aluminum corner profiles.



## Flexible Front Strips

2-layer, elastic substrate of polyester, PVC-coated on both sides, reaching 3mm thick.

## Durable Air Bag

Made from weather-proof hard polyester fabric, with high strength and friction-resist.

Standard Size  
W 3400 mm x H 3600 mm

# RAPID ROLLER DOOR

Rapid Roller Door is widely used in modern factories and warehouses. Because of below unique characteristics, it becomes the first choice in many cases.

## Product Information

### High Speed Opening and Closing

The running speed can reach 2m/s, 10 times as traditional roller shutter door. This obviously improves passing efficiency through it and enhances overall output.

### High Frequency Operation

The operation frequency can reach more than 1000 times per day without any faults. This meets need of heavy traffic in some areas.

### High-level Automation

Automatic radar or other devices can be equipped, realizing auto control of the door. This enhances automation level and work efficiency.

### Excellent Safety Performance

Dual protection design. Every door is equipped with safety photo sensor and proximity sensor, avoiding collision accidents and protecting passing human or vehicles.

### Effective Insulation

Benefiting from fast opening and closing, it can reduce the air flow between indoor and outdoor and prevent dust from entering the room. At the same time, energy is saved by reducing thermal conduction.

### Complying with GMP Norm

Special design seal structure. PVC fabric is dust-proof and easy for cleaning.

# STANDARD TYPE



Mostly widely used model of high speed doors. Its fabric is with aluminum wind bars, achieving good wind resistance. Thus, standard type is fit for both inside and outside use. Its driving motor and control system are advanced servo type, with better movement: accuracy and quicker response. Even under very high-frequency operation, the motor can keep good working condition.



Special double encoder design. In-built encoder works together with external encoder to control the running. They calibrate with each other and guarantee precise limit.



Torque servo system. The motor automatically adjusts its torque every time when the door runs, according to specific load condition and running speed.

- Max Dimension : 5000 mm Wide, 6000 mm High
- Max Opening Speed : 1.8 m/s
- Max Closing Speed : 1.0 m/s
- Wind Resistance : Beaufort Scale 10 (25m/s)
- Work Life : 15 Years
- Power Supply : 1-Phase 220  $\pm$  15% V Or 3-Phase 380 v  $\pm$  15% V, 50/60 hz
- Protection Level Of Electric : Ip55
- Available Colors Of Fabric : Yellow, Blue, Red, Grey, White, Clear

# Colors Available For All Models Of Fabric Material Rapid Doors



**Blue**



**Yellow**



**Red**



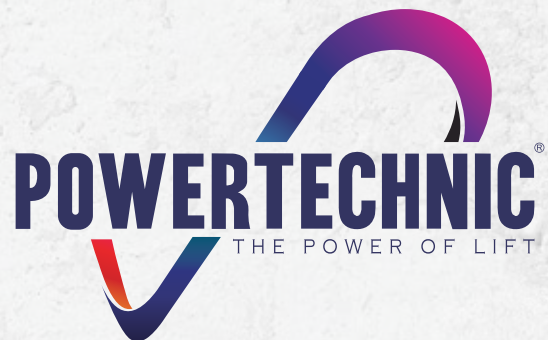
**Grey**



**White**



**Full Clear**



**POWERTECHNIC HANDLING EQUIPMENT (M) SDN BHD**  
(200201007360) (575023-H)



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