TECH
HANDLING EQUIPMENT

DOCK LEVELER

INTRODUCTION

DOCK LEVELER, 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 leveler's design accommodates various vehicle heights, enhancing work flow and reducing potential hazards.

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

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

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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 leveler. It consist of hydraulic pump, electric motor, cylinder and hoses.

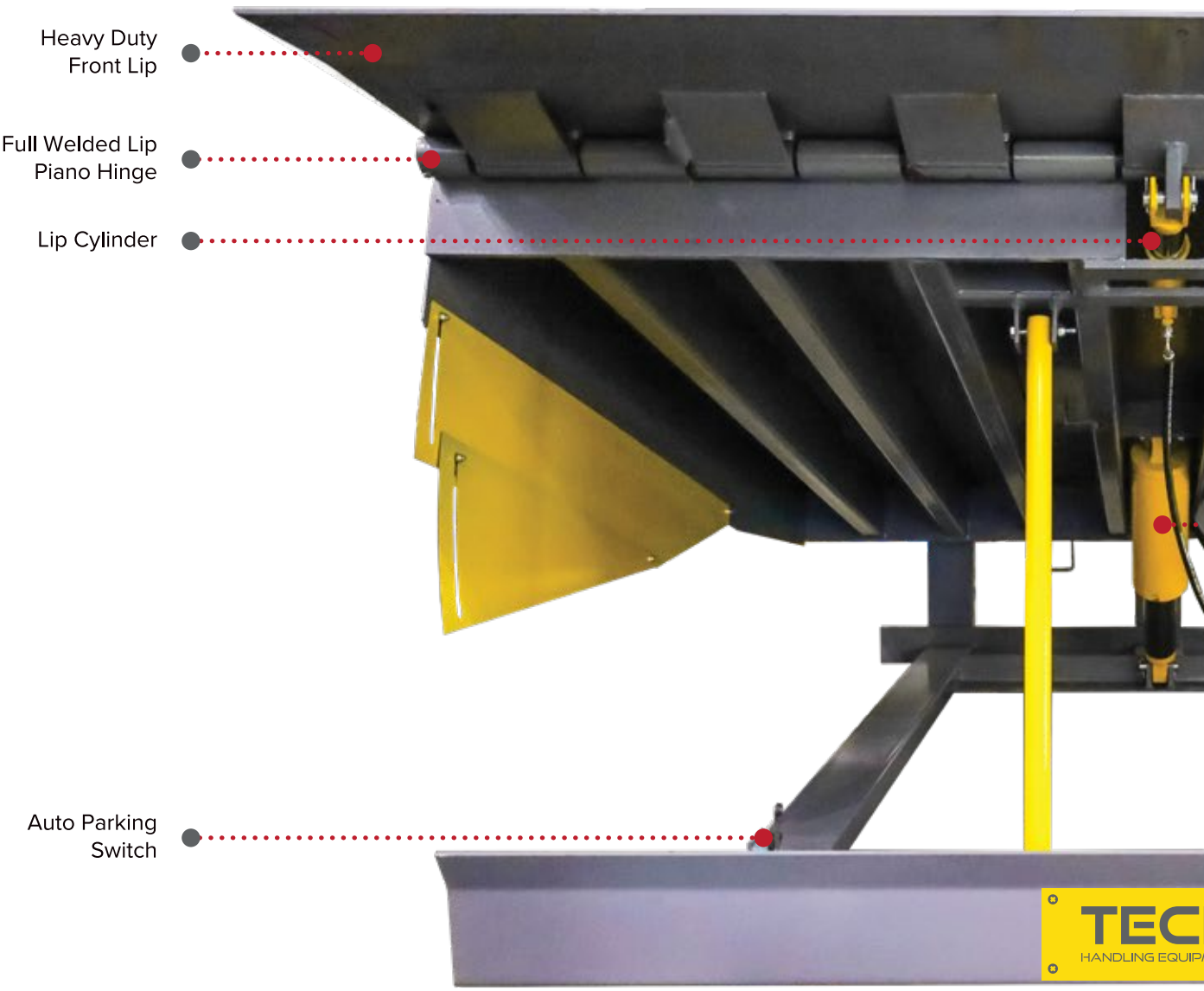
When activated, the hydraulic pump pressurises the hydraulic fluid, causing the cylinder extend, this movement raises or lowers the platform to match the truck bed height.

ELECTRICAL

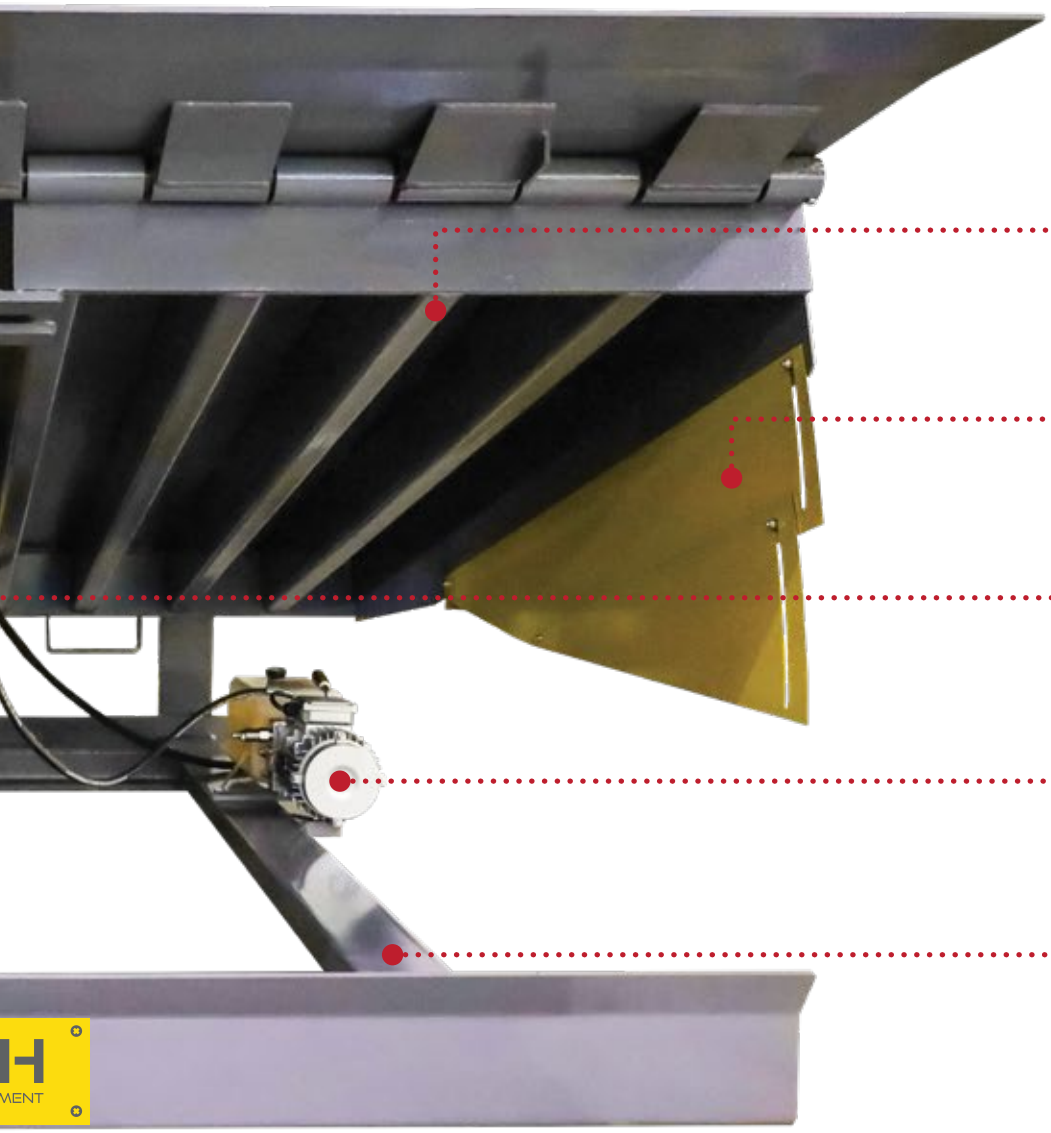
The electrical system control the overall operation of the dock leveler, it includes component such as MCB, limit switch and control panels.

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

MAIN


Heavy Duty
Front Lip
Full Welded Lip
Piano Hinge
Lip Cylinder
Auto Parking
Switch

COMPONENTS



8 nos Main Deck Supporting Beam (with 165mm interval)

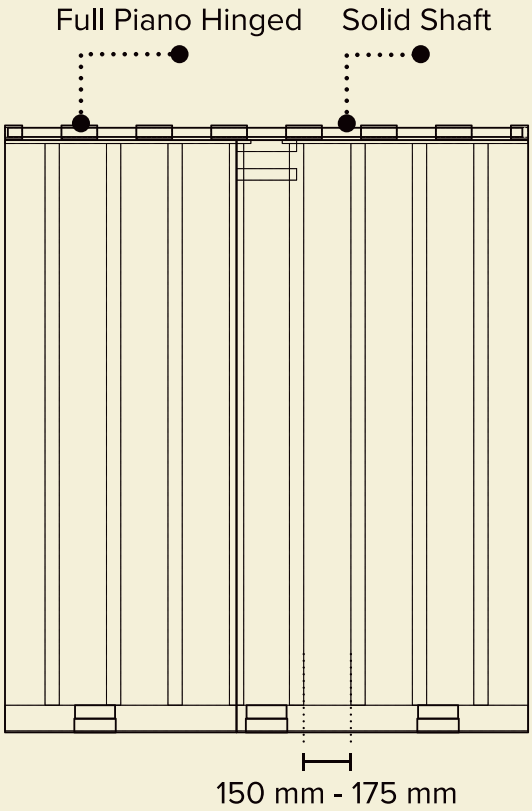
Safety Toe Guards (to prevent foot unexpected entry)

4” Displacement Main Cylinder (with Safety Check Valve to prevent sudden drop)

Self Contained 2.0 Hp Hydraulic Power Pack (with overload protection)

Extra Solid Bottom Structure

STRUCTURE



Heavy Duty Lips

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

Rigid Platform

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

Solid Piano Hinge

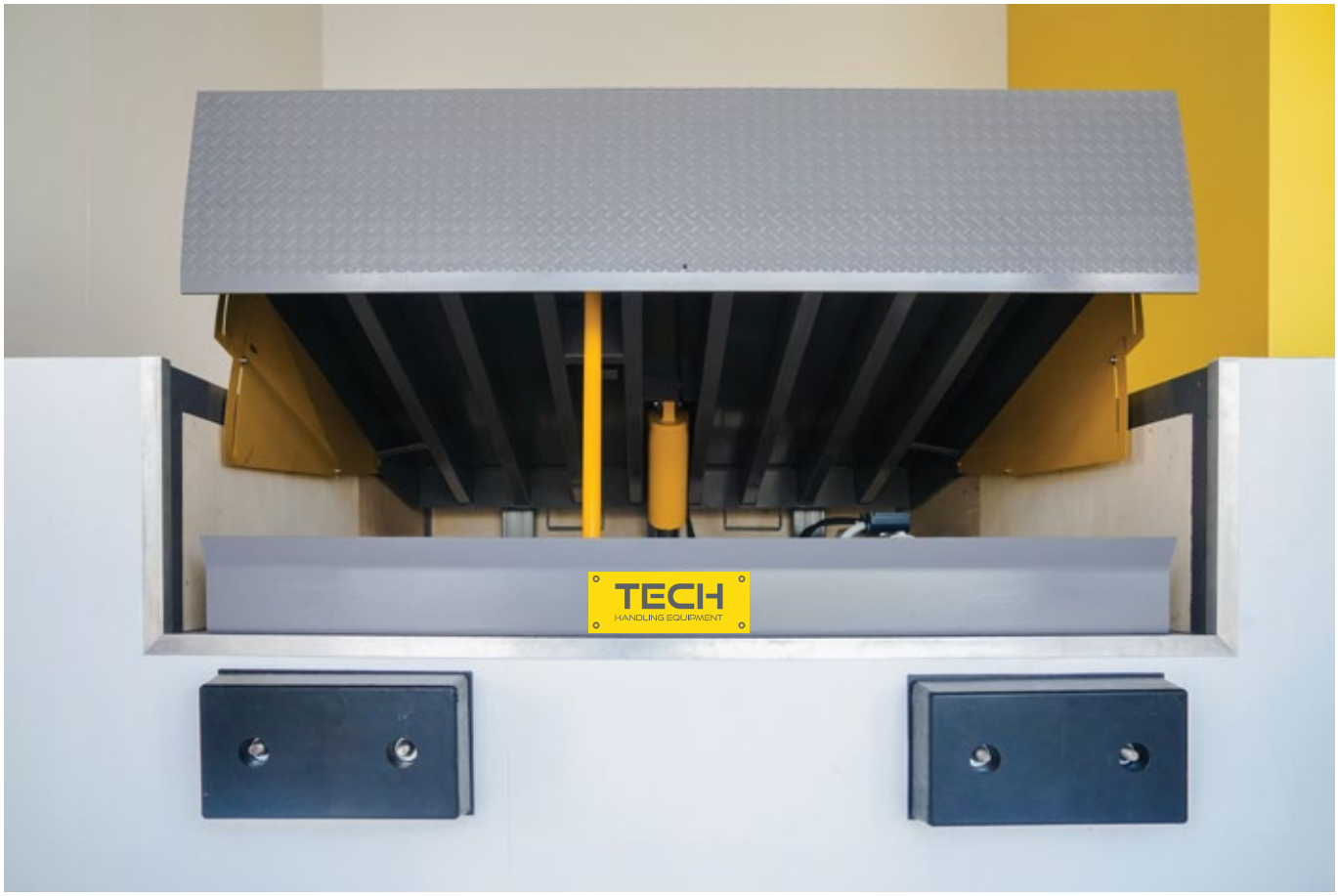
Continuous hinges that run the full width of the dock leveler platform, connecting the platform to the lip, compared to traditional multi-point hinges, piano hinges require less maintenance and offer better alignment over time. It provides smooth movement when the lip deploys and retracts, minimizing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

Sufficient Toe Guard

It is on the side of dock leveler 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 leveler, it ensures that the platform remains secure during loading end unloading actvities.



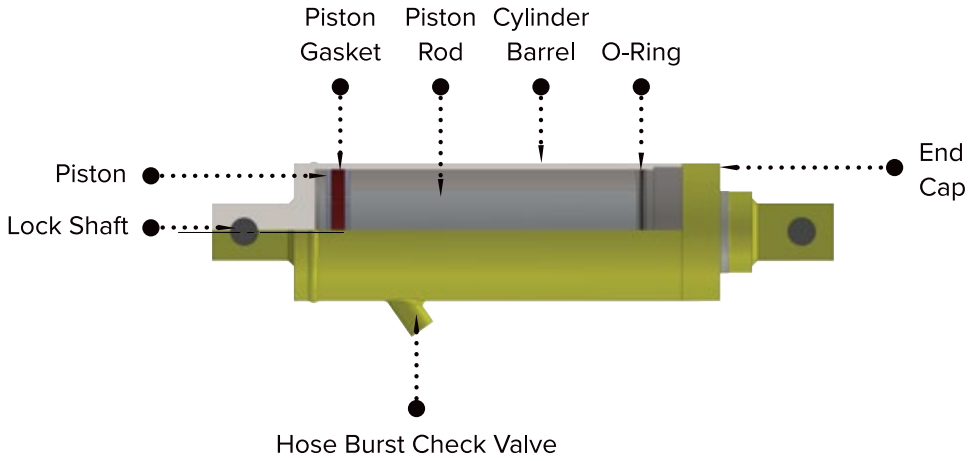
Rigid Base Beam

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 leveler, 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 leveler.

Low Operating Pressure

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

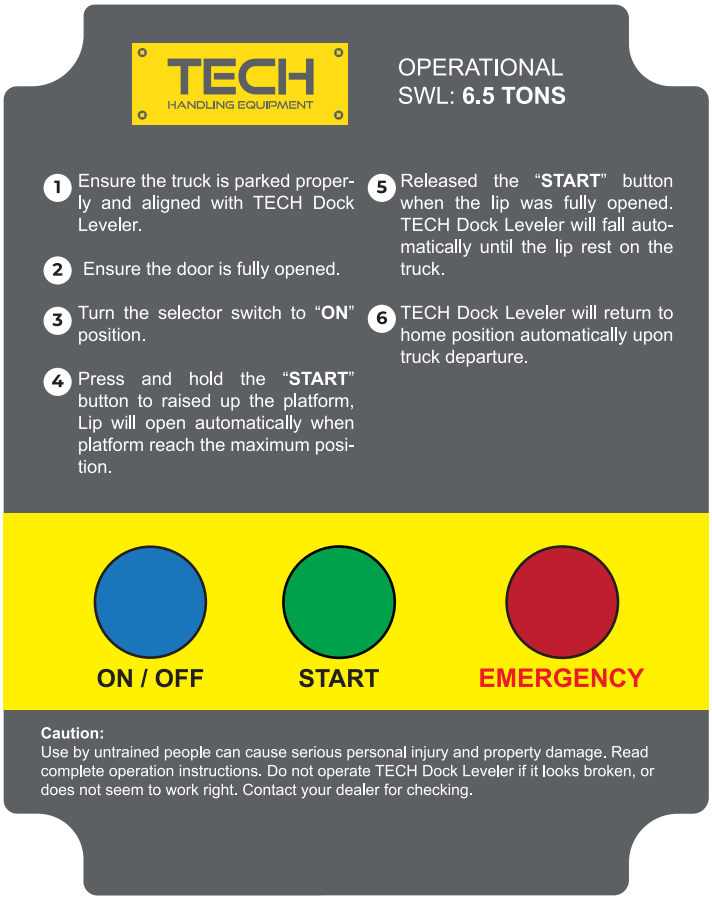
Pump Overload Protection

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 leveler 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 leveler, preventing unintended movement of the platform and ensuring operational safety.

ELECTRICAL



Electrical Emergency Stop

For holding platform position.

Full Auto Operating System

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

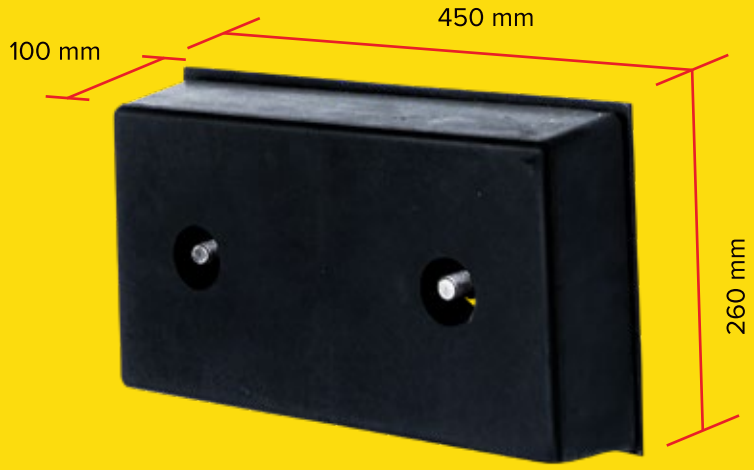
Auto Return System

The auto return system designed to ensure that the dock leveler platform consistently returns to a neutral position after each use. This feature is citical 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 safely and efficiency in industial 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.

ACCESSORIES



Rubber Bumper

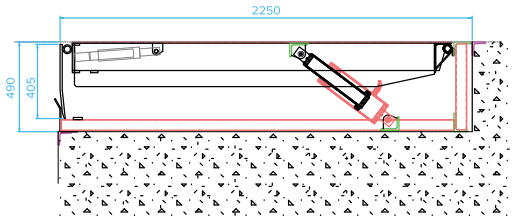
Rubber bumpers for dock levelers are essential components used to protect both loading docks and vehicles during the loading and unloading process, our rubber bumper covers larger areas, offering more comprehensive protection.

DOCK LEVELER STANDARD SIZE

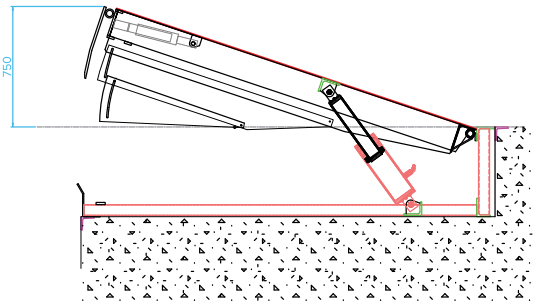
	Model-13	Model-18
Platform Material	Mild Steel Chequered Plate	
Platform Thickness	6mm	9mm
Lip Thickness	12mm	21mm
Lip Hinged	Full Piano	
Platform Hinged	Piano Type	
Platform Hinged Quantity	3	4
Platform Support Beam	150 ~ 180mm	

		DOCK LEVELER DIMENSIONS					PIT DIMENSIONS		
	MODEL-N	Capacity	Length	Width	Height	Lip Length	Total Length	Length	Width	Height
MODEL-13	THDL-490-225183-13	13 Ton	2250	1830	490	406	2656	2260	1880	510
	THDL-490-243183-13	13 Ton	2430	1830	490	406	2836	2440	1880	510
	THDL-490-300183-13	13 Ton	3000	1830	490	406	3406	3010	1880	510
	THDL-490-225210-13	13 Ton	2250	2100	490	406	2656	2260	2150	510
	THDL-490-243210-13	13 Ton	2430	2100	490	406	2836	2440	2150	510
	THDL-490-300210-13	13 Ton	3000	2100	490	406	3406	3010	2150	510
MODEL-18	THDL-490-225183-18	18 Ton	2250	1830	490	406	2656	2260	1880	510
	THDL-490-243183-18	18 Ton	2430	1830	490	406	2836	2440	1880	510
	THDL-490-300183-18	18 Ton	3000	1830	490	406	3406	3010	1880	510
	THDL-490-225210-18	18 Ton	2250	2100	490	406	2656	2260	2150	510
	THDL-490-243210-18	18 Ton	2430	2100	490	406	2836	2440	2150	510
	THDL-490-300210-18	18 Ton	3000	2100	490	406	3406	3010	2150	510

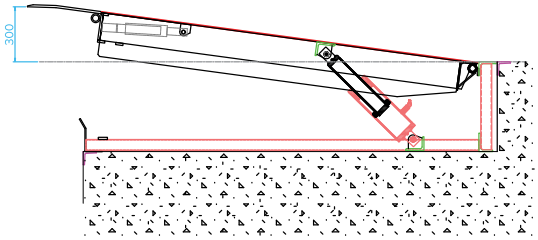
Platform Size	:	1830(W) x 2250(L) x 490(H) mm
Pit Size Request	:	1880(W) x 2260(L) x 510(H) mm
Lip Length	:	406 mm
With Lip Extended	:	2656 mm
Static Capacity	:	13,600 kgs
Dynamic Capacity	:	6,500 kgs
Level of Balance	:	+300mm / -300mm
Collapsed Heigth	:	490 mm
Main Deck Material	:	6mm Mild Steel Chequered Plate
Rubber Bumper	:	Inclusive 2 units as standard



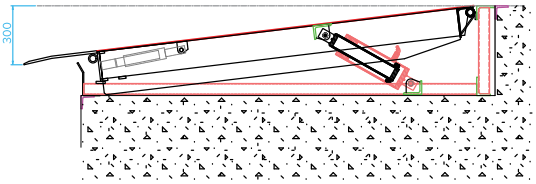
Parking Position



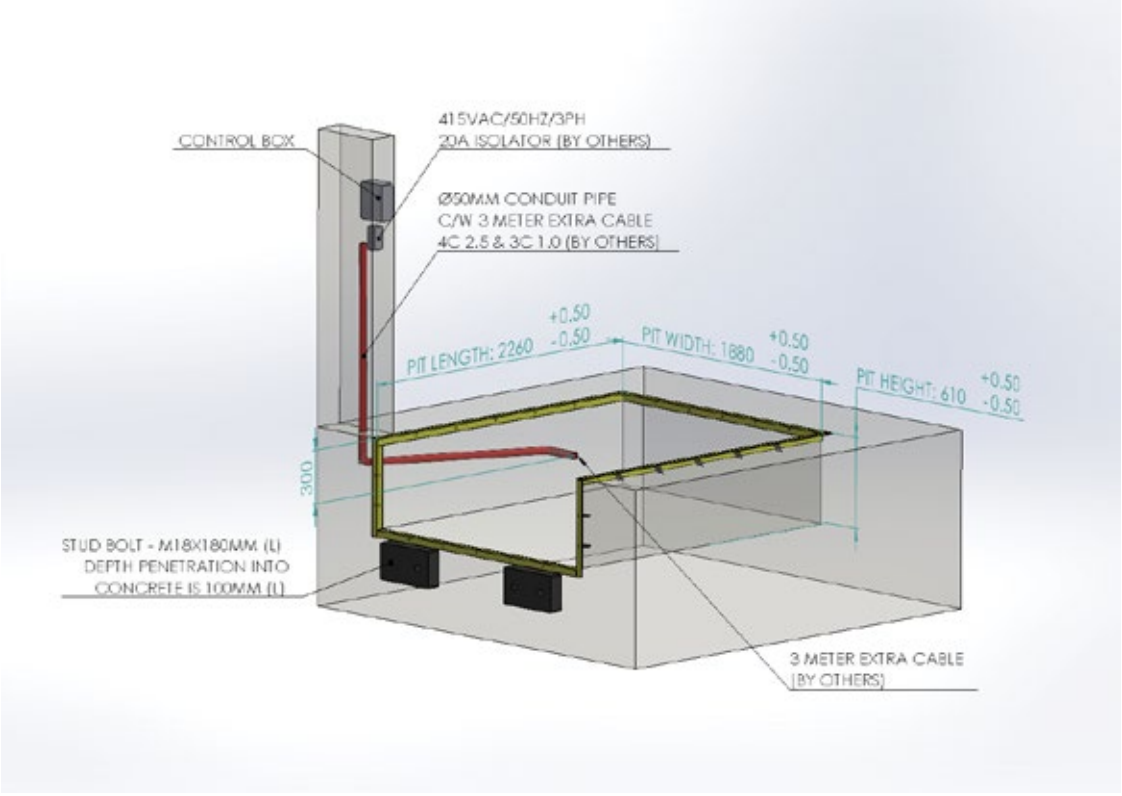
Lifting Position



Up Working Position



Down Working Position

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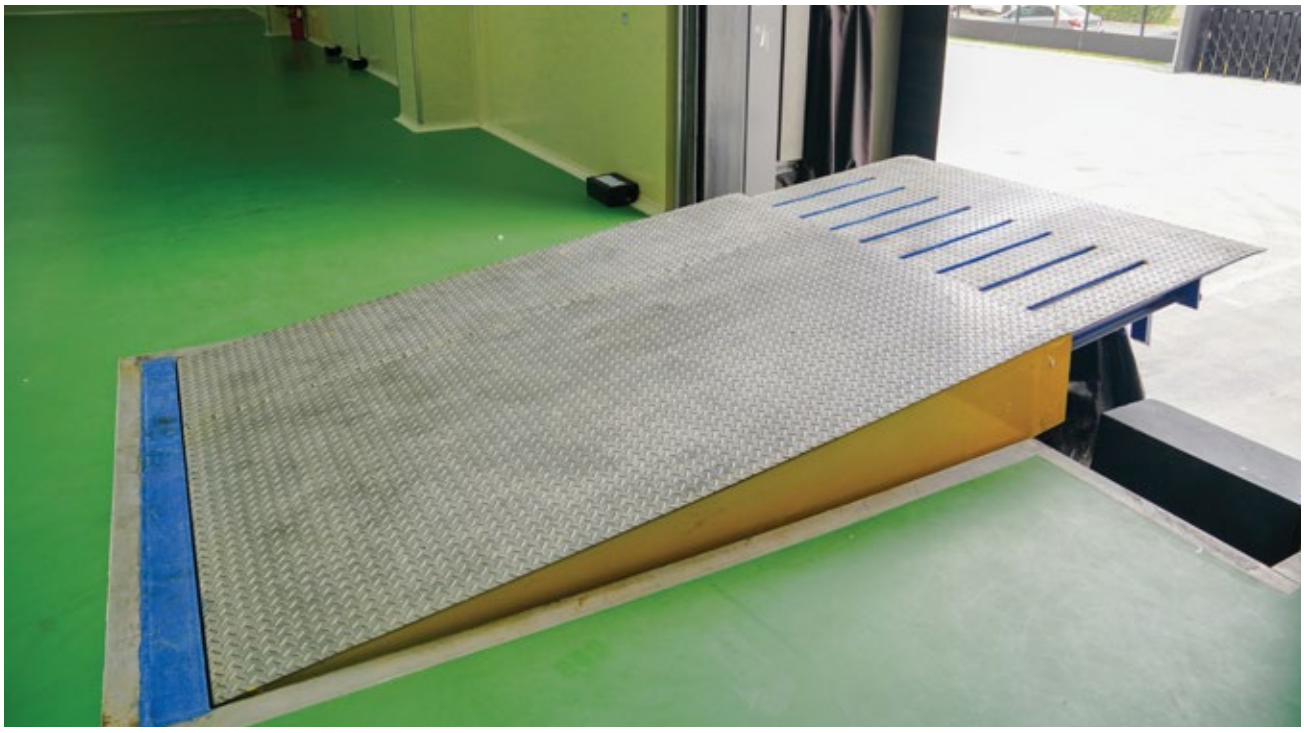
TELESCOPIC DOCK LEVELER

A telescopic dock leveler 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 levelers, the telescopic version has an extendable lip that can be precisely positioned, offering more flexibility during loading and unloading operations.

This type of dock leveler 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 leveler, 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.



TELESCOPIC DOCK LEVELER DIMENSIONS							PIT DIMENSIONS		
Model	Capacity	Length	Width	Height	Lip Length	Total Length	Length	Width	Depth
DLTP-590-2520	13.6 Ton	2560	2000	590	1000	3560	2570	2050	610
DLTP-590-2518	13.6 Ton	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 rinkhading process.

Mechanical Dock Shelter

TECH dock shelter is engineered with a fully automated operation system, allowing for seamless control via a single push button. This design facilitates the lifing 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^2
- 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-rosive solid wood, touching with the wall closely. Inside is filled with highly compressed sponge, with density of 30KG/m^3. 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

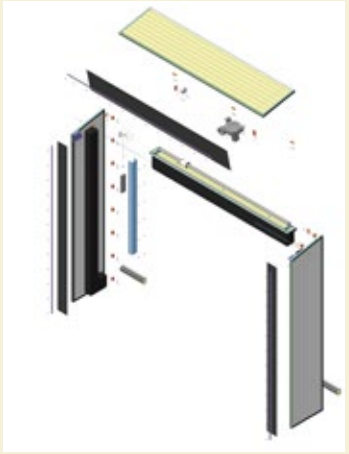
Made from PVC fabric with self-extinguishing function. Weight: 800g/m^2. There are fabric shutter folds on top beam and two side columns. Thus it can endure long-time friction and squeezing.

Inflatable Dock Shelter

Two sides and top part are PVC fabric material airbag. When working, the automat-ic 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 RRD-STD

Mostly widely used model of high speed doors. Its fabric is with aluminum wind bars, achieving good wind resistarice. Thus, RRD-STD 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 ± 15% V Or 3-Phase 380 v ± 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

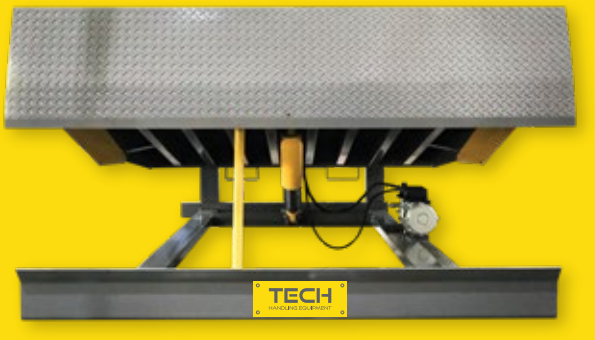
Full Clear

ALL IN ONE PACKAGE

INCLUDE :

- Service Maintenance
- Breakdown Labour
- All Parts Ready

24 Hours On-Call Service



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