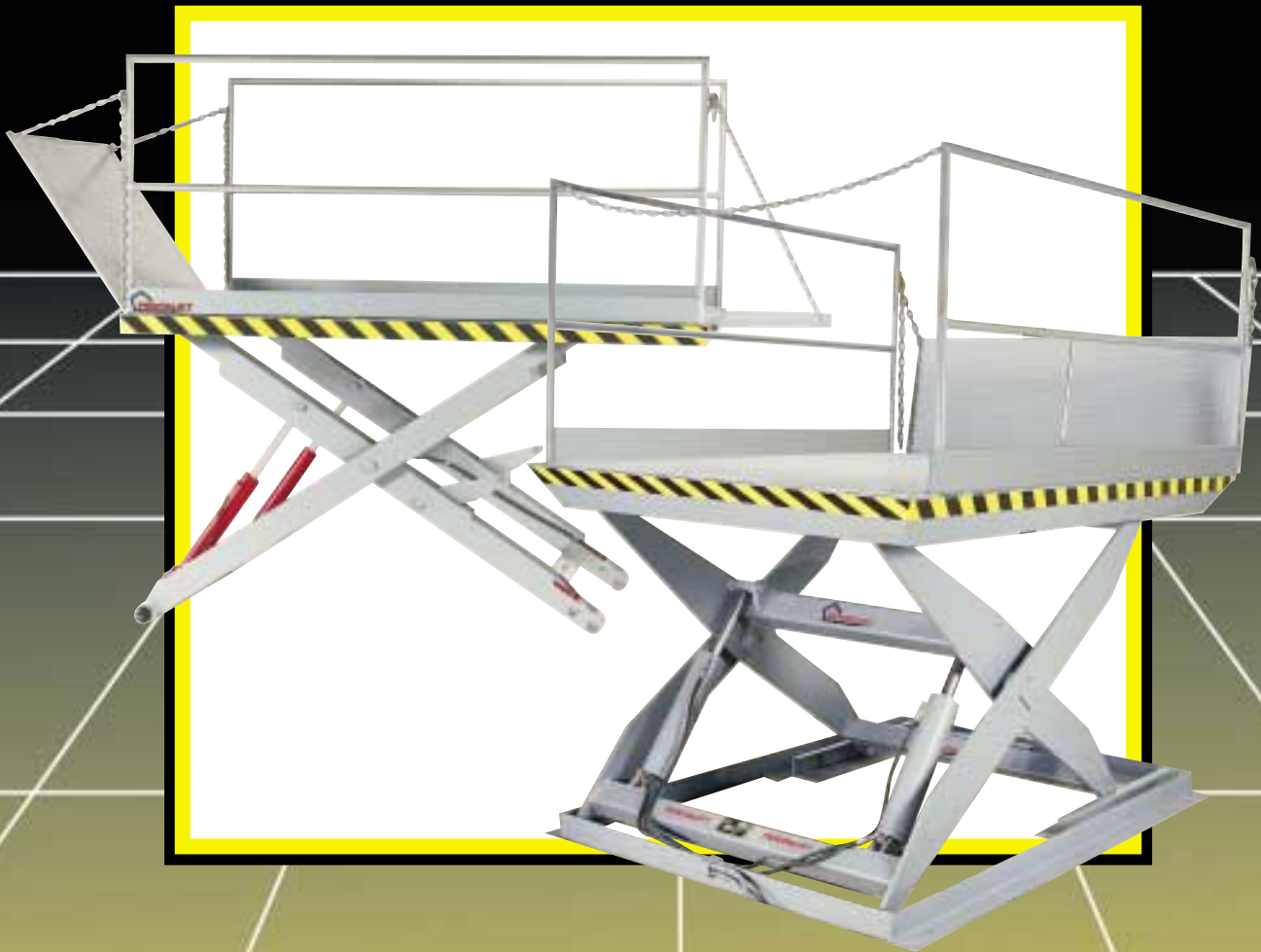


# Pentalift Elevating Docks

Pit Mounted and Low Profile Elevating Docks



## Could This Happen At Your Facility?

The loading dock is one of the busiest and most dangerous areas in a facility. A typical loading dock is exposed to the challenges of varied vehicle bed heights and configuration, changing load characteristics, and high frequency use each day. People can be very innovative in finding a way to get the job done. Many times this work is done with little regard being paid to safety or efficiency.



Manual Loading or “hand bombing” products onto a trailer is inefficient and compromises safety. A single accident can result in substantial insurance and workers’ compensation costs.



Dragging heavy objects to the back of the trailer where a forklift can unload them increases the potential of product damage and creates a serious safety concern.

## It’s Not Too Late to Change

Pentalift Pit Mounted and Low Profile Elevating Docks can be easily installed into new construction projects or existing facilities. Installation of an elevating dock is a safe and economical alternative to reconstructing the entire dock area. Elevating docks provide an increased service range which will eliminate the potential of unsafe loading operations due to severe height differences between the dock and the truck/trailer bed.

# Moving You Closer To Efficiency And Safety

## Pit Mounted Elevating Docks


Pit installed units allow ground level access for all ranges of loading vehicles without the need for ramps. Vertical travel of 59" accommodates virtually all truck/trailer bed heights. Breaking down pallets of product can be eliminated, thereby dramatically increasing efficiency and safety. The potential of product damage is also reduced. Pit mounted elevating docks are available in sizes and capacities to suit the most demanding applications.



## Low Profile Elevating Docks

A lowered height of 6" allows ground level access without the need for the construction of a pit. With vertical travel of 54", a Pentalift Low Profile Elevating Dock can accommodate truck/trailer heights from pick-ups to semi-trailers. Since it requires no pit and has the capability to be semi-portable, a Low Profile Elevating Dock is an effective solution for ground level doors, confined spaces and leased building applications. Sizes and capacities are available to suit a wide range of applications.

# All Pentalift Elevating Docks Benefit From Our Tradition Of Quality, Performance And Reliability



**Plated Access Chain**  
Plated access chain to prevent the operator from accidentally stepping off the deck.

**Removable Guardrails**  
In accordance to OSHA standards, 42" high, with midrails and kickplates.

**Hinged Lip**  
Steel checker plate lip with full width lip hinge. (split or one piece aluminum lips are available)

**Deck**  
Constructed of checker deck with structural deck supports for maximized load distribution and support.

**Heavy Gauge Steel**  
All Pentalift Elevating Docks are constructed with heavy-duty structural steel components to provide rugged industrial service and a long service life.

**Heavy-Duty Torque Tubes**  
Torque tubes are constructed from high tensile, structural tubing designed to minimize twisting and deflection, giving a high degree of rigidity and stability.

**Scissor Legs**  
Solid steel, one-piece construction with holes precision reamed for accurate alignment then inspected for absolute conformance to design specifications. Scissor leg center pins are chrome plated.

**Hydraulic Junction Block**  
Hydraulic hoses are connected to a frame-mounted junction block to minimize hose movement, preventing wear and abrasion.

**Lubricated For Life Bearings**  
All pivot points have precision made pins that operate in "lubricated for life", maintenance-free bearings.

**Structural Base Frame**  
Constructed from high yield, structural angle to provide a rigid support base for the lift. The flange of the base angle minimizes potential for obstructions to enter into the path of the leg rollers.

**Dual Lower Rollers**  
Dual rollers allow better weight distribution and increased roller and bearing life. All rollers are tracked for maximized stability.

**PentaFLOW Hydraulic Cylinders\***  
Exclusive PentaFLOW bypass cylinders. Hydraulic velocity fuse is standard.

## Shipped Complete

Finished product, power unit, controls and all other components are factory load-tested and shipped fully assembled.



**Control by a NEMA 4X hand-held push-button control station.**  
(Optional deck-mounted and key lock-out features are available.)

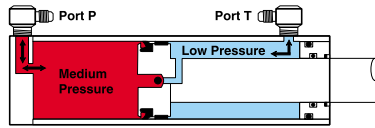
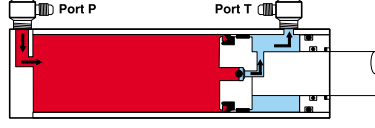
**EXCLUSIVE PENTALIFT**

**PentaFLOW**

**HYDRAULIC CYLINDER**

The lift cylinder is the heart of any hydraulic lift system. Pentalift's exclusive design ensures the longest cylinder life, reduces maintenance and eliminates oil spills.

**HERE'S HOW IT WORKS:**  
Pentalift's PentaFlow cylinder is completely sealed from the surrounding atmosphere and all components are continuously bathed in fresh oil. Contamination and deterioration of the cylinder cannot occur. When the cylinder reaches full extension, the bypass valve opens and allows oil to flow through the piston to the rod side of the cylinder, out the port, and back to the reservoir. This prevents the cylinder from dead ending and building high stresses in the cylinder, equipment structure, and hydraulic system. Air in the cylinder is automatically ejected through the bypass valve eliminating the need for manual bleeding which often results in oil spills. Note: Precision turned, ground, polished and chrome plated cylinder rod and "drawn over mandrel" precision honed barrels are standard on all PentaFlow cylinders.

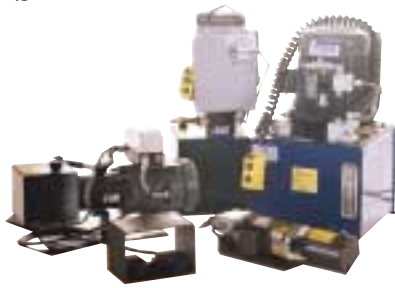



■ Oil under medium pressure
■ Port P (Oil from pump)

■ Oil under low pressure
■ Port T (Oil to reservoir)

\* PentaFLOW hydraulic cylinders eliminate the potential of internal contamination from the outside environment ensuring equipment longevity in the most demanding applications.

# Options



## Electro-Hydraulic Power Unit

Remote mounted power unit with integral oil reservoir. Totally enclosed, continuous duty motor incorporates a NEMA 12 pre-wired control enclosure. Motor starter, transformer and overload protection are standard on all three-phase power units. The power unit is completely assembled, filled with oil and factory tested prior to shipment. (Hydraulic fluid is mineral based oil).

## Controls

## Safety Trip Bars



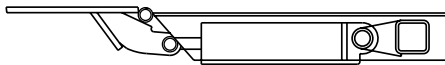
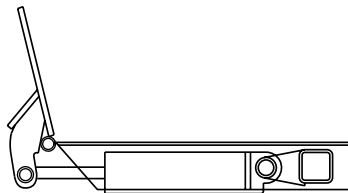
Fixed or removable, deck-mounted push-button controls for greater operator convenience.



Electrically interlocked safety trip bars provide additional safety for pit installations.

## Automatic Hydraulic Roll-Off Stop

ROLL OFF STOP  
UP POSITION



ROLL OFF STOP  
DOWN POSITION

Optional roll-off stop automatically raises when the lift is activated to prevent the operator from accidentally rolling off the deck. When in the fully lowered position, the roll-off stop will lie flush with the surface level.

## Other Options

- split lips
- aluminum lips
- hydraulic lips
- lip lift assist spring
- up travel limit switch
- coil cord for push-button control
- additional control stations
- wall bracket for power unit

# Model Selection Chart\*

MODEL NUMBER**	DECK SIZE (wide x long)	VERTICAL TRAVEL (inches)	CAPACITY RANGE (lb) (see note #1)	LOW HEIGHT (in) (see note #2)
HED 47_	48 in x 84 in	50"	3,000-20,000 lb	12"
HED 48_	48 in x 96 in	59"	3,000-20,000 lb	12"
HED 49_	48 in x 108 in	59"	3,000-20,000 lb	12"
HED 410_	48 in x 120 in	59"	3,000-20,000 lb	12"
HED 57_	60 in x 84 in	50"	3,000-25,000 lb	12"
HED 58_	60 in x 96 in	59"	3,000-25,000 lb	12"
HED 59_	60 in x 108 in	59"	3,000-25,000 lb	12"
HED 510_	60 in x 120 in	59"	3,000-25,000 lb	12"
HED 68_	72 in x 96 in	59"	3,000-25,000 lb	12"
HED 69_	72 in x 108 in	59"	3,000-25,000 lb	12"
HED 610_	72 in x 120 in	59"	3,000-25,000 lb	12"
HED 612_	72 in x 144 in	59"	3,000-25,000 lb	12"
HED 78_	84 in x 96 in	59"	3,000-25,000 lb	12"
HED 79_	84 in x 108 in	59"	3,000-25,000 lb	12"
HED 710_	84 in x 120 in	59"	3,000-25,000 lb	12"
HED 712_	84 in x 144 in	59"	3,000-25,000 lb	12"
HED 88_	96 in x 96 in	59"	3,000-25,000 lb	12"
HED 89_	96 in x 108 in	59"	3,000-25,000 lb	12"
HED 810_	96 in x 120 in	59"	3,000-25,000 lb	12"
HED 812_	96 in x 144 in	59"	3,000-25,000 lb	12"

\*\*Model Number: Example - Model **HED61215** is derived by taking **HED612\_** [HED = hydraulic elevating dock, 612 = width (in feet) & length (in feet) plus the capacity in 1,000's lb for the \_ (ex. 15 for 15,000 lb). Side and end load capacities are lower than rated capacity. Consult the factory for this information on a specific model basis.

**Note #1** - Units available in the following capacities: 3,000, 4,000, 5,000, 6,000, 8,000, 10,000, 12,000, 15,000 and 20,000 lb. Larger platform elevating docks available with rated capacity of 25,000 lb.

**Note #2** - A 20,000 capacity elevating dock has a low height of 20". For 25,000 lb and greater consult the factory.

\* Other deck sizes and higher capacities available. Consult the factory.

## Technical Specifications

Hydraulic Elevating Dock Model No. HED \_\_\_\_\_ as manufactured by Pentalift Equipment Corporation. Elevating dock to have a deck size of \_\_\_\_\_" wide x \_\_\_\_\_" long, built of checker plate with 8" bevel toe guards. The unit shall have a lifting capacity of \_\_\_\_\_ lb, vertical travel of \_\_\_\_\_" and a lowered height of \_\_\_\_\_". An 18" long x 60" wide one-piece steel checker plate lip is to be provided on the rolling end. Hydraulic lift cylinders shall be PentaFLOW style equipped with an automatic bypass system at the top of cylinder stroke. A velocity fuse shall be incorporated to prevent deck free-fall in the event a hydraulic hose is accidentally severed. Scissor legs shall be of solid steel construction for maximum strength and rigidity. Scissor legs shall be equipped with dual lower rollers as well as upper and lower roller retainers. All pivot points to have chromed pins and "lubricated for life" bearings. Unit to have two removable guardrails 42" high x \_\_\_\_\_" long with midrails and 4" high kickplates. An integral, swing away maintenance stand shall be provided for safety during servicing. Controls shall be a NEMA 4X hand-held push-button. The power unit is to be remote mounted and consist of a TEFC continuous duty motor with integral hydraulic fluid reservoir. The motor shall be equipped with a NEMA 12 pre-wired control enclosure. The elevating dock shall be shipped complete with hydraulic fluid.



## Low Profile Elevating Docks Require No Pit

### Low Profile Elevating Docks (LPE)

The Pentlift Low Profile Elevating Dock is a surface mounted, stationary or semi-portable unit offering several deck sizes with different capacities. The design of the LPE unit ensures maximized stability and full use of the deck area for product transfer. Cylinder placement is completely beneath the deck eliminating *above deck obstructions* common to other designs with vertical or mast type cylinder arrangements. Full use of the deck area adds the capability to load/unload in all four directions for greater efficiency and reduced product damage.

### Ground Level Access

A minimal lowered height of 6" facilitates easy access for all types of material handling equipment. A hinged approach ramp can be mounted on the fixed end of the deck of the elevating dock, to provide ground level access.



### Truck/Trailer Access

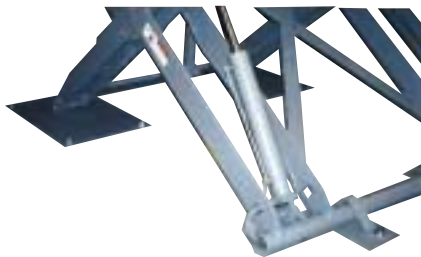
An 18" long x 60" wide one-piece steel checker plate hinged lip is mounted on the rolling end of the deck of the elevating dock to facilitate access to the truck/trailer. Lip options include: aluminum lip, larger sizes, one piece and/or split construction. Pit construction is not required for the low profile model. This saves installation costs and makes relocation easier than it is for pit mounted elevating docks.

# Options



## Deck Mounted Power Unit

The power unit can be mounted on the deck of the lift in a NEMA 12 enclosure. The power unit can also be located outside the deck area to allow full use of the deck.



## Retaining Cradles And Wear Plates

For stationary applications, the elevating dock should incorporate optional cradles and wear plates. This feature will increase the end load capacity ratings of the unit and prolong the life of the rollers.



## Automatic Mechanical Roll-Off Stop

When not in the fully lowered position, the approach ramp automatically acts as a roll-off stop to prevent operators from accidentally rolling off the deck. In the fully lowered position the approach ramp allows easy access for loading vehicles.

# Other Options

- split lip
- aluminum lip
- lip lift assist spring
- safety trip bars
- up travel limit switch
- coil cord for push-button control
- deck-mounted control
- additional control stations
- wall bracket for power unit



## Semi-Portable

A removable dolly handle is available to allow repositioning of the elevating dock for convenience or for storage in an inside area.

## Model Selection Chart

MODEL NUMBER*	DECK SIZE (wide x length)	VERTICAL TRAVEL (inches)	CAPACITY RANGE (lb) (see note #1)	LOW HEIGHT (in) (see note #2)
LPE 58_	60 in x 96 in	54"	4,000-8,000 lb	5 3/4"
LPE 510_	60 in x 120 in	54"	4,000-8,000 lb	5 3/4"
LPE 68_	72 in x 96 in	54"	4,000-8,000 lb	5 3/4"
LPE 610_	72 in x 120 in	54"	4,000-8,000 lb	5 3/4"
LPE 78_	84 in x 96 in	54"	4,000-8,000 lb	5 3/4"
LPE 710_	84 in x 120 in	54"	4,000-8,000 lb	5 3/4"
LPE 88_	96 in x 96 in	54"	4,000-8,000 lb	5 3/4"
LPE 810_	96 in x 120 in	54"	4,000-8,000 lb	5 3/4"

\*Model Number: Example - Model **LPE785** is derived by taking **LPE78\_**[LPE - low profile elevating dock, 78 = width (in feet) & length (in feet) plus the capacity in 1,000's lb for the \_ (ex. 5 for 5,000 lb.)

Side and end load capacities are lower than rated capacity. Consult the factory for this information on a specific model basis.

**Note #1** - Units available in the following capacities: 4,000, 5,000, 6,000 and 8,000 lb.

**Note #2** - Without cradles and wear plate. An 8,000 lb capacity low profile elevating dock has a low height of 6".

**Note #3** - Units only are recommended for use with pallet jacks and manually pushed carts. These units are not intended for use with powered forklift trucks and other power wheeled equipment.

## Technical Specifications

Low Profile Hydraulic Elevating Dock Model No. LPE \_\_\_\_\_ as manufactured by Pentalift Equipment Corporation. Elevating dock to have a deck size of \_\_\_\_\_" wide x \_\_\_\_\_" long, built of checker plate. The unit shall have a lifting capacity of \_\_\_\_\_ lb. Vertical travel of \_\_\_\_\_" and a lowered height of \_\_\_\_\_". An 18" long x 60" wide one piece steel checker plate lip is to be provided on the rolling end. A \_\_\_\_\_" long x \_\_\_\_\_" wide hinged approach ramp is to be provided on the fixed end. Hydraulic lift cylinders shall be PentaFLOW style equipped with an automatic bypass system at the top of cylinder stroke. Hydraulic cylinders are to be advantageously located completely beneath the unit allowing full use of deck area and product transfer in all four directions. A velocity fuse shall be incorporated to prevent deck free-fall in the event a hydraulic hose is accidentally severed. Scissor legs will incorporate solid steel cross bracing for increased structural stability. All pivot points to be equipped with chromed pins and "lubricated for life" bearings. Units to have two removable guardrails 42" high x \_\_\_\_\_" long with midrails and 4" high kickplates. Controls shall be a NEMA 4X hand-held push-button. The power unit is to be remote mounted and consist of a TEFC continuous duty motor with integral hydraulic fluid reservoir. The motor shall be equipped with a NEMA 12 pre-wired control enclosure. The elevating dock shall be shipped complete with hydraulic fluid.

## If You Can't Reach The Trailer ... Move It

Most facilities are facing the challenges of servicing the wide variety of truck/trailer bed heights now common in the industry. Substantial height differences between the trailer bed and the loading dock create difficulties for the material handling process, and reduce efficiency and safety at the loading dock. Pentalift Truck Levelers offer a practical and safe solution to accommodate significant dock to truck height differences. Two styles of Truck Levelers are available. Surface Mounted and Pit Mounted. Heavy-duty construction and the use of state-of-the-art design/manufacturing methods ensure performance and reliability. Both designs provide a means to accommodate the widest range of trailer configurations while maximizing efficiency at the loading dock. A complete range of sizes and capacities are available to suit all applications. Safety can be further addressed through the use of a deck mounted vehicle restraint system.



Pit Mounted Truck Leveler receiving a trailer.

### Specifications

Pit Mounted Truck Leveler as manufactured by Pentalift Equipment Corporation. The deck will be supported by heavy-duty structural "I" beams, positioned for optimum deck support. The unit shall be one piece construction for easier installation at site. Sides of deck are to be equipped with rigid steel safety skirts. Hydraulic cylinders are to be heavy-duty PentaFLOW bypass type. PentaFLOW cylinders eliminate the need for internal mechanical cylinder stops, and prevent unwanted pressure build-up that causes structural stress. PentaFLOW cylinders eliminate the potential of internal contamination from the outside environment ensuring equipment longevity in the most demanding applications. Hydraulic power is to be supplied by a 5 hp power unit. Power unit is to be equipped with a pre-wired NEMA 12 control enclosure. The control shall be a wall mount push-button. The deck surface is to be equipped with full length, covered wheel locators.

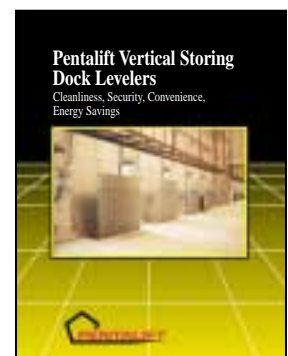
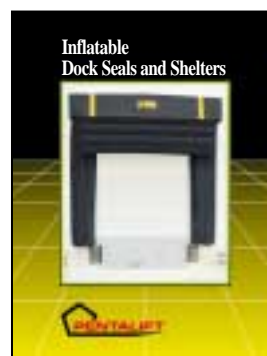
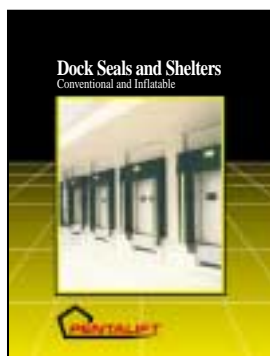
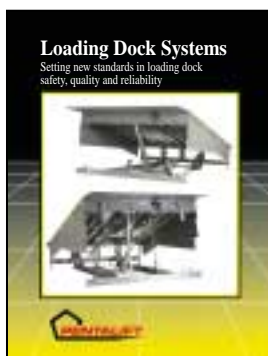


Surface Mounted Truck Leveler in the raised position.

### Specifications

Surface Mounted Truck Leveler as manufactured by Pentalift Equipment Corporation. The deck will be supported by structural steel, positioned for optimum deck support. The unit shall be one piece construction for easier installation at site. Hydraulic cylinders are to be heavy-duty PentaFLOW bypass type, mounted at each side of the unit in protective enclosures. PentaFLOW cylinders eliminate the need for internal mechanical cylinder stops, and prevent unwanted pressure build-up that causes structural stress. PentaFLOW cylinders eliminate the potential of internal contamination from the outside environment ensuring equipment longevity in the most demanding applications. Hydraulic power is to be supplied by a TEFC 5 hp power unit. Power unit is to be equipped with pre-wired NEMA 12 control enclosure. The control shall be a wall mount push-button. For additional safety, the unit is equipped with three-sided, safety yellow accordion skirting.

## Other Pentalift Loading Dock Products



Consult a Pentalift Sales Representative for additional information or equipment recommendations.

**NOTE:** Some photos may reflect products with optional features. All Pentalift Equipment products are subject to design improvement through modification without notice.

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