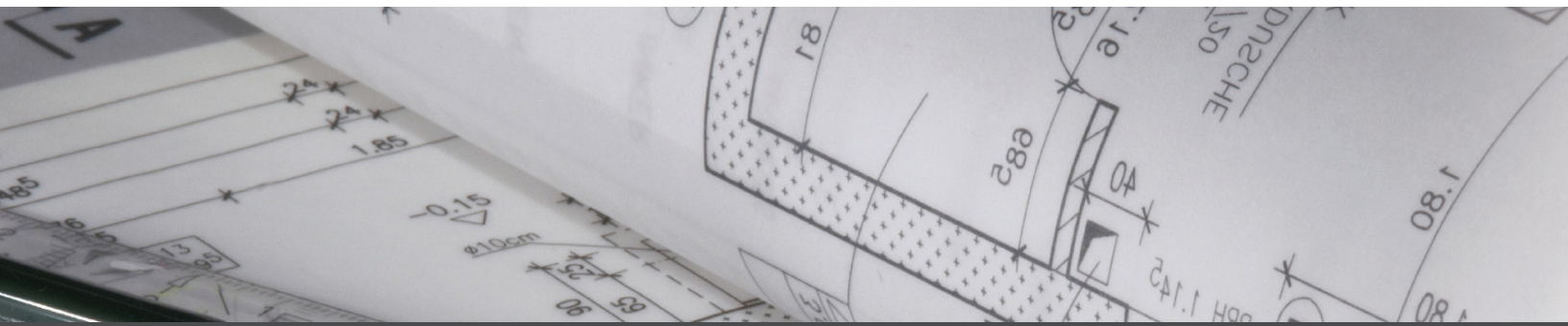




## Pentalift Pentaloader Palletizer

Increases safety, efficiency and reliability in palletizing operations. The "green" solution as there is no requirement for an electric, hydraulic or pneumatic power source.



Engineered for Safety



# Pentalift Pentaloader: The safe, efficient "green" solution to palletizing

## The problem:



Over exertion in reaching, bending during palletizing operations.

## The result:



Over exertion results in injury and all the problems and costs associated with injury on the job.

## The solution:



The Pentalift Pentaloader makes the palletizing job easier, safer and more efficient by automatically maintaining the height of the pallet at an proper ergonomic height. The top facilitates 360 degree rotation of the pallet to minimize reaching and stretching.

The Pentaloader's spring cam arrangement facilitates the automatic adjustment to the ergonomically correct height as the weight of the load changes. The Pentaloader's operation is accomplished without connection to a power source such as electric, hydraulic or pneumatic. This translates to the Pentaloader being "green" from an environmental standpoint. This "green" designation in combination with all the safety and efficiency benefits translate to a modern palletizing device that is unsurpassed in value and environmental benefits.

The Pentaloader is a unique product due to the engineering behind its compression spring operating mechanism. The load handling capacity of the Pentaloader is easily adjusted to suit the application. The operator simply inserts or removes a "U" pin to engage or disengage up to three of the five springs in the Pentaloader's spring pack. Other designs typically require the complete removal or addition of springs for load adjustment; changes which add cost due to longer setups and lost time.

The Pentaloader design is patented. The Pentaloader does not operate using compressed and contained air. Air operation systems are prone to leakage and require regular refilling for load adjustment and if the air bag is punctured the competitors unit will instantly drop.

# Pentalift Pentaloader design features

**Rotating Top:** The Pentaloader features a solid steel, one-piece rotating top assembly with four corner guards. The corner guards not only prevent the removal of a pallet when the Pentaloader is in the lowered position, they also ensure accurate pallet positioning and lessen the likelihood of off-centre loading. The top is fabricated from 3/8" thick solid steel plate. The top rotates a full 360 degree. The centre pivot features a heavy duty central thrust bearing. Supporting the top are four load bearing steel rollers. Each of these rollers is bearing equipped to ensure long, trouble-free and easy operation. A countersunk *center bolt* secures the rotating top in position to prevent the accidental lifting and removal of the top.



## Spring Cam Arrangement:

The patented design of the Pentaloader has its five spring pack acting in a linear fashion. This facilitates the automatic adjustment of the Pentaloader to the ergonomically correct height as the weight of the load changes.

**Pivot Points:** Pivot points are precision-reamed for accurate alignment and inspected to ensure conformance to the engineering design specifications. Precision-turned, ground, polished and chromed pins as well as lubricated-for-life bearings are used at all pivot points to ensure maintenance-free, reliable operation.

**Spring Torque Equalization Bar:** This design feature ensures that the spring thrust bar is always precisely aligned to equalize the spring pack forces.

**Scissor Legs:** Each of the Pentaloader's lifting legs is precision cut from one piece of high tensile and high yield steel plate. The design profile of the legs has been engineered to provide both optimal support strength and maximum deck rigidity.

**Load Handling Adjustment:** Adjusting the Pentaloader's load handling capacity to suit the application is simple. Four incremental settings are possible. By simply inserting or removing one, two or three of the "U" pins (as shown below), the Pentaloader can be quickly setup to handle the specific load. The Pentaloader's springs never need to be changed.

**Safety:** Each of the five double spring sets encases an independent guide shaft which holds the spring in the unlikely event of a spring break. This design feature also ensures that even with a broken spring, the Pentaloader will bear the load and prevent a dangerous free fall of the load.



**Decals:** Highly visible, detailed safety and operation decals are in place to promote safe operating procedures.



## Pentaloader options



**Accordion Skirting**  
Steel reinforced pleated yellow vinyl barrier minimizes the entry of debris under the platform.

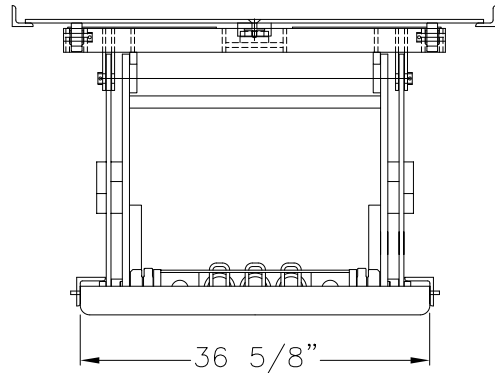
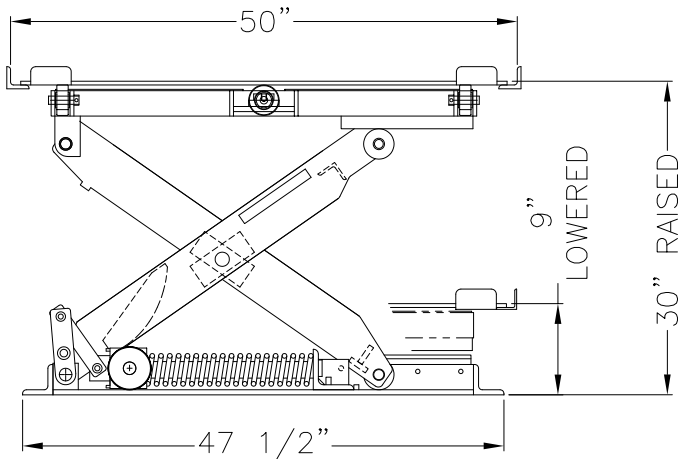


**Brake (For Rotating Top)**  
(Shown Red)  
The brake locks the rotating top in the desired position.



**Semi Portable**  
Frame mounted rollers and a removable dolly handle allow easy relocation of the Pentaloader. (Pentaloader not be moved when loaded.)

## Pentaloader specifications



Lowered Height = 9 inches  
Full Travel = 21 inches  
Raised Height = 30 inches

## Pentaloader models

There are four (4) Pentaloader models - XPL1, XPL2, PL1 and PL2. Each of these Pentaloader models has four (4) settings to facilitate the handling of a wide range of applications.

**Note:** All models are built with components engineered for a maximum load of 4500 Ibs.

*"Our Primary Goal is to engineer and build the best products to ensure the ultimate in user safety and product reliability"*

*Paul Pedersen*

*President*

*Pentalift Equipment Corporation*

Pentalift also manufactures a complete line of Lift Tables for your in plant material handling needs. Individual Product Catalogs are available and can also be found on our website.

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

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