# Hydraulic Dock Levelers

Serco hydraulic dock levelers are installed in thousands of high-volume loading docks worldwide, delivering outstanding performance for strength, safety and durability.



# **SERCO HYDRAULIC DOCK LEVELERS:**

**High Performance. Low Maintenance.** 

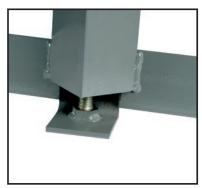
**SERCO HYDRAULIC DOCK LEVELERS** provide fast, easy and safe push-button operation. When compared to other types of levelers, hydraulic dock levelers provide the most durable performance with the lowest lifetime cost of ownership.



# A SAFER, STRONGER DOCK LEVELER

FOR DECADES all dock levelers installed in a concrete pit have required an installer to place and weld steel shim under the rear frame in order to level the device and provide long-term support. This conventional process can lead to install errors as installers are often working under the dock leveler in a cramped environment and may not use the correct size shim and/or weld the shim properly. The result... the dock leveler can suffer structural fatigue which may lead to expensive repair or replacement.



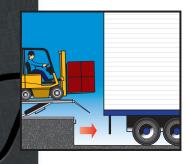




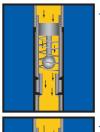
## **SAFETFRAME ADVANTAGES:**

- Greater structural strength & durability
- Eliminates installation issues common with conventional dock levelers
- Ensures level transition from warehouse floor to dock leveler
- Eliminates premature structural fatigue due to improperly shimmed/installed dock leveler

## **VELOCITY FUSE: FAIL-SAFE DOCK SAFETY.**



In the event a truck prematurely departs the dock position or simply slips out of range of the leveler lip, the velocity fuse lock-up stops the leveler freefall anywhere within its working range.

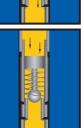


◆ In an emergency situation, the velocity fuse, sensing a surge of fluid, locks up instantly. The device is reset by cycling the leveler.

Serco's reusable, non-adjustable hydraulic system restricts free-fall should a truck depart prematurely.

In an open position the velocity fuse

allows the hydraulic fluid to flow freely.

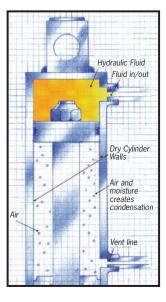


# REGENERATIVE HYDRAULICS. A PREMIER SYSTEM FOR REDUCED MAINTENANCE PLUS INCREASED PRODUCTIVITY AND SAFETY.

#### **Comparative Hydraulic System**

In some systems, only the piston side of the cylinder is filled with hydraulic fluid,

with air on the rod side, which requires an additional cylinder vent line and may cause condensation which causes corrosion and seal damage.



Hydraulic Velocity Fuse. Serco regenerative hydraulic systems are equipped with a velocity fuse to restrict free-fall should a trailer depart prematurely.

Seal bathed in oil — prevents dry rotting and cracking which prevents leaks.

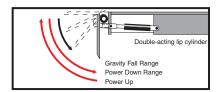
Fluid on both sides of cylinder prevents corrosion by eliminating air from system.

Main fluid intake and return



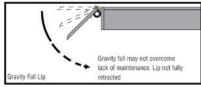
HYDRA MAX improves dock safety, reduces maintenance and increases the working life of the leveler by combining the benefits of a gravity-fall lip and power-in lip control using a double-acting cylinder that ensures the leveler completes its proper functions in all operating cycles.

# POWER-IN/GRAVITY FALL LIP



▲ The lip initially falls by gravity. When the lip reaches mid point of cycle range, the solid-state proximity switch activates the hydraulic power unit that powers in the lip and restores the lip to the keepers.

# **COMPETITIVE GRAVITY FALL LIP**



▲ Restoring lip relies solely on gravity and lacks positive power-in feature. Friction in the lip hinge may prevent complete retraction of the lip and its ability to store to the keepers.



# UNMATCHED PERFORMANCE FOR STRENGTH, SAFETY AND DURABILITY.

**SERCO HYDRAULIC DOCK LEVELERS** are designed and built to meet the demands of high-volume loading docks. They offer minimum lip crown to accommodate powered pallet jacks with low clearance and to prevent door and ceiling interference in high-cube loading conditions.

- ① Integral maintenance strut for deck with lockout capability.
- ② Patented split-box beam design for added strength and ability to conform to out-of-level conditions.
- 3 Structural center beam support for three-wheeled forklifts.
- 4 Regenerative hydraulics with nonadjustable safety velocity fuse.
- **⑤** Exclusive SafeTFrame™ provides superior structural support and level interface with warehouse floor.
- **6** Inverted hydraulic cylinder to eliminate damage due to debris and dust.
- CLEAN FRAME® pit design for easy clean-up and routine maintenance and inspection.

A HYDRAULIC DOCK LEVELER FOR EVERY BUDGET AND APPLICATION.

- 8 Integral lip support latch.
- **9** Hydraulic power pack. Can also be remote-mounted on the wall or on custom stanchions located between the docks.
- 10 Reinforced gusseted lip.
- The Grease fittings on lip hinge tubes.
- Permanent nite-lock prevents unauthorized entry beneath dock doors.
- (B) Patented HYDRA MAX lip control.
- Here Full operating range telescoping toe guards.

Note: 45,000 lbs. capacity HFC model pictured





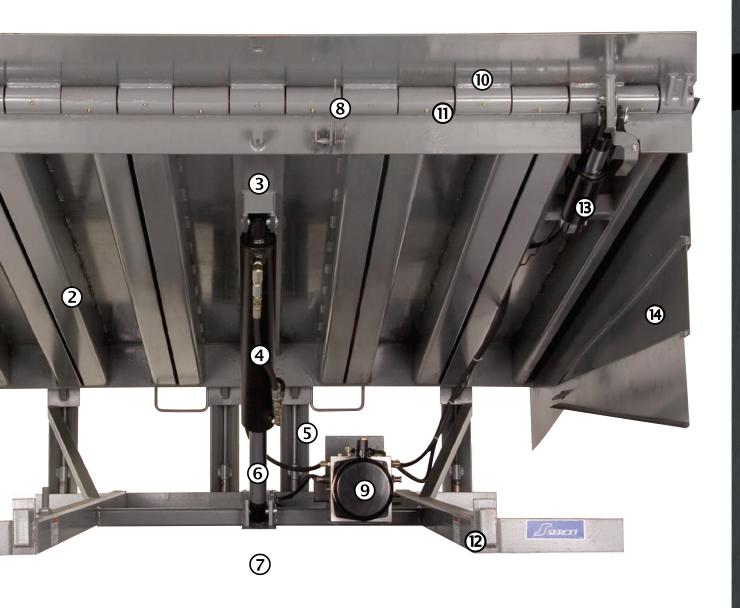
#### **▲ HLR Series Dock Leveler**

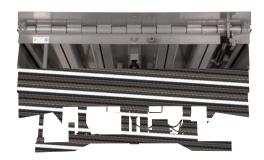
Features powered-in/powered-out lip control, automatic return-to-dock, single push-button control, safety velocity fuse, CLEAN FRAME design and integral maintenance strut.



#### ▲ HLO Series Dock Leveler

Features push-button control with quick cycle lip extend, powered-in/powered-out lip control, safety velocity fuse, CLEAN FRAME design, integral maintenance strut and mushroom-style stop button.





# ▲ HFC Series Dock Leveler

The top-of-the-line conventional pit-style leveler with CLEAN FRAME design, weatherseal, grease fittings and control panel with mushroom-style stop button, quick-cycle lip extend and auto return-to-dock.



## **▲ HD Series Dock Leveler**

Available with two main and lip hydraulic cylinders, five-position rear hinge with steel bushings and velocity fuse safety system. Optional full control panel available with mushroom-style stop button, quick-cycle lip extend and auto return-to-dock.

# DOCK-GUARD™ BARRIER LIP

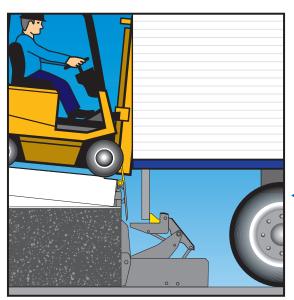
**THE SERCO DOCK-GUARD BARRIER LIP** is designed to prevent accidental roll-off. In a stored position, the leveler lip extends above the deck providing a full-time solid steel barrier. In the extended position, the lip remains flush to the leveler deck. The DOCK-GUARD Barrier Lip leveler's hinge is stronger than competitive models and requires no additional maintenance.



#### FEATURES

- 400% stronger lip than conventional levelers
- 700% stronger than most competitive models
- Can withstand impact from a 15,000-lb. forklift at 5 mph
- Solid construction is stronger than slotted lip designs and eliminates extra maintenance
- Full-time safety at and below dock level

▲ In a stored position, the DOCK-GUARD Barrier Lip extends 5" above the deck, providing a solid steel barrier to prevent accidental run-off.



▲ In an extended position, the DOCK-GUARD Barrier Lip provides a smooth transition for forklift operation.

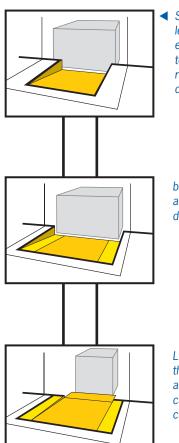
 In below-dock loading, the DOCK-GUARD Barrier Lip prevents front wheels from rolling off the leveler.

# THE VERSA SERIES:

# **Extraordinary Flexibility for Extra-Wide Loads.**

#### THE SERCO PATENTED ADVANTAGE.

The patented Serco VERSA SERIES LEVELERS are the only dock levelers with the flexibility to handle conventional loads as well as high-cube (low boy) below-dock loading at the same dock position. With the popularity of air-ride suspensions, highcapacity "low boy" trailers and the increasing use of low-profile tires, truck bed heights can be extended beyond the 12" reach of most conventional levelers, making service of these trailers difficult or impossible. And with trailer widths averaging up to 8' 6", conventional 7' 0" wide levelers leave little or no room for forklift maneuvering. When freight handlers attempt to "cube out" the trailer, loads are often impossible to end-load without the use of dedicated docks or expensive truck-leveling devices.



 Standard 6' or 7' wide levelers can make extra-wide loads hard to load/unload, often resulting in product damage...

but the VERSA SERIES allow you 9' of below-dock access.

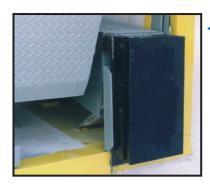
Leave the bumpers in their stored position and the Versa-Dock XL can also serve as a conventional leveler.



▲ The VERSA SERIES provide 9' wide unobstructed access for extra-wide below dock loads.

# FULL ACCESS FOR WIDE BELOW-DOCK LOADS.

The Versa Dock Series of levelers incorporates all the proven features of Serco's hydraulic dock levelers with the addition of hydraulically positioned steel faced bumpers. The powered dock bumpers and available deck widths up to 9' give true unrestricted access to the widest truck trailers. The hydraulically powered bumpers provide more reliability and control than spring loaded or "canister' style bumper assemblies.



 Steel-faced bumpers, shown in the belowdock position, are standard.



SSERCO

# **PUSH-BUTTON CONTROLS AND** ADVANCED SAFETY SYSTEMS.

# SECURITY AND FULL CONTROL.

Serco hydraulic dock leveler functions are controlled through a push-button control panel or as a component on a Master Control Panel™. All leveler operations can be interlocked with other dock functions such as vehicle restraints, dock doors and security systems.

# **PUSH-BUTTON SAFETY.**

A mushroom-style stop button is available as standard equipment on some hydraulic dock leveler control panels and on the Master Control Panel. In the event of an emergency or displaced cargo which fouls the working area, the operator simply pushes the button to freeze the leveler in any part of its cycle and interrupts the power to all other control panel functions. To restore, the operator simply pulls the button out to proceed with the loading/ unloading operation.

■ Serco Master Control Panels interlock leveler functions with other dock devices to prevent operation until all the safety systems are



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