

# RHH-4000 Hydraulic Dock Leveler

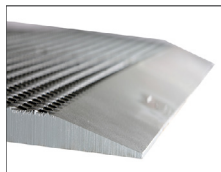
Best in class leveler safely bridges the gap while providing the smoothest transition in the industry.



Constant radius rear hinge



Two-point crown control



Extended Lip Chamfer



Rugged Steel Safe-T-Lip

## Help Reduce Chronic Injuries

The Smooth Transition Dok System® helps minimize Whole Body Vibration (AKA “Dock Shock”) by up to 16%<sup>2</sup>, increasing productivity through reduced chronic tibial injury and absenteeism.

- » Constant radius rear hinge reduces the gap at the back of the leveler to a constant 1/3” space between the leveler deck and rear weldment; no matter the leveler position.
- » Two-point crown control reinforces the front hinge and reduces the crown at the transition from leveler deck to leveler lip.
- » Extended lip chamfer reduces the impact felt when transitioning from the leveler lip to the trailer bed.
- » Reduce “Dock Shock” by 50% with the Smooth Transition Dok System and modern forklift design.<sup>2</sup>

## Increase Productivity With Optimal Safety

With effortless push button operation, easy clean frame, and a wide variety of safety features, personnel are safer and the dock leveler has a longer life expectancy.

- » Infinite Lip Control helps reduce operating time and amplifies safety by allowing the operator to extend the lip or stop the platform at any time during leveler travel.
- » Safe-T-Lip® helps prevent vacant drop-off, while its slotted-lip design safely positions the barrier out of the way for unobstructed end-load access.

## Secure Loading & Unloading Operations

Rite-Hite® structural design allows the leveler to maintain constant contact with a trailer, helping to remove any unexpected obstacles.

- » Air ride suspensions and uneven loads can cause an unsafe separation between trailer floor and leveler lip. The L-Beam stringer (with two extra beams compared with competitors) increases deck strength and allows the leveler to flex up to 4” under its own weight, empowering the lift operator to drive with the confidence that they will not endure jarring impacts caused by a hazardous gap; especially when exiting.

## Enhance Safety During Maintenance

The Safe-T-Strut™ through-the-lip design provides communication and safety from any angle inside or outside the building.

- » The central, through-the-lip location keeps the strut in place throughout the entire operating range of the leveler. This position enables it to withstand an accidental impact of a 10,000 lb fork truck at 4 mph.
- » Visibility from inside the building indicates to all that maintenance is being performed and helps prevent accidental operation, keeping personnel safe during scheduled maintenance.

## Achieve Lower Lifetime Ownership Costs

Unique structural engineering stands firm under extreme warehouse demands to lower repair and maintenance costs, while increasing product lifespan.

- » The formed front header (connection between deck and leveler lip) completes the four-sided rectangular box construction and includes interlocking and welded stringers to create a stronger bond, increase overall strength and help limit lifetime maintenance downtime issues.
- » Certified to meet and exceed ANSI MH30.1 performance testing standards.

## Industry Leading Warranty

Rite-Hite warranties are based on material handling gross weights and frequency of use. Consult your Rite-Hite Representative to discuss qualifications through the Dock Leveler Investment Guide (DLIG).

- » 10-Year non-prorated warranty (based on DLIG).
- » Up to 20-Year limited money-back warranty (based on DLIG).

# Specifications

## General Description

The RHH-4000 Hydraulic Dock Leveler offers the safety and reliability the industry expects from Rite-Hite. Our first dock leveler with a Smooth Transition Dok System, the RHH-4000 is proven to reduce whole body vibration<sup>1</sup>, helping to protect people and material handling equipment while increasing productivity.

### Leveler Deck

Smooth Transition Dok System includes:  constant radius rear hinge to reduce bumps and gaps at rear of leveler,  two point crown control to evenly distribute weight load and extend the life of the front hinge,  optimized lip chamfer to improve smoothness by 20%,  8" (203mm) deck beam spacing to support use of  3-wheel and  4-wheel forklifts, and  4" (101mm) Self-Flex Deck does not require the weight of the forklift to accommodate unbalanced/unlevel trailer beds as the forklift travels in to and out of the trailer in service.

**Leveler Length (ft.):**  6  8  10  12  Enter Below

**Leveler Width (ft.):**  6  6.5  7  Enter Below

**Pit Length:** \_\_\_\_\_ **Pit Width:** \_\_\_\_\_ **Pit Depth:** \_\_\_\_\_

### Leveler Lip

**Standard Lip Length (in.):**  16  18  20 **Exclusive Safe-T-Lip™ (STL) barrier** offered as  18" (457 mm) lip w/ 5" (127 mm) STL or  20" (508 mm) lip w/ 7" (178 mm) STL helps protect against open dock accidents, helping to stop a 10,000 lb. (4,535 kg) load moving at 4 mph (6 kph).

» Unique Safe-T-Lip can be easily positioned out of the way for end-loading (*only with STL opt.*)

**Manual End Load Legs**

**Lip keepers** with  cross-traffic support and  automatic night locks help prevent building break-in attempts through dock areas.

**Infinite Lip Control**  **Extended Lip Chamfer**

**Lip Crown:**  2 Pt Increased Crown Control

2 Pt Reduced Crown Control  2 Pt Crown Control (STD)

**Lip Taper (in.):**  TPR2  TPR3  TPR4  TPR5  TPR5.5

Notch2  Notch3  Notch4  Notch5  Notch5.5

### Leveler Capacity

Rite-Hite levelers are certified to exceed ANSI

MH30.1 dock leveler performance testing standards.

**Leveler capacity by application:**  C  D  F  G

**Optional MH14.1-1978 decals:**  MH14.1-1978 37,000 (C)

MH14.1-1978 46,000 (D)  MH14.1-1978 59,000 (F)

MH14.1-1978 66,000 (G)

### Standard Leveler Features

Two bumpers:  Excluded  RH410-10P1  RHV420-11P1

RHV420-11SFP1  RH612-14P1  RHV620-11P1

RHV620-11SFP1  DS412-14P1  DS612-14P1

**Toe Guard:**  Standard Grey (Integral) & Yellow (Full-range toe guard)  Grey (INT & FRTG)  Yellow and Black Stripes (INT & FRTG)  Yellow (INT & FRTG)

**Weatherseal:**  NB-1 Factory Installed  NB-1 Kit (Field)

PT-2 Factory Installed  PT-2 Kit (Field)

## Operation

**1.** To raise the platform, push and hold the "Raise" button on the control box. **2.** After the lip clears the trailer floor, push and hold the "Lip Out" button (levelers equipped with Infinite Lip Control (IFC)) while continuing to hold the "Raise" button to extend the lip. For levelers without IFC, raise the platform until the lip fully extends. **3.** Release the push buttons to allow the leveler platform and lip to lower to the truck bed, above and below dock height, without manual chain pulling. **4.** To store the dock leveler, press the "Raise" button until the lip clears the trailer bed and release the button to return the dock leveler to stored position.

## Hydraulics

The low pressure hydraulic pump, manifold & oil reservoir are contained in an integral assembly. Hoses routed under the platform, away from debris. All fittings are JIC flange or "O" ring flange.  Biodegradable hydraulic fluid or  MIL-5606 Oil-based hydraulic fluid options available. The platform is raised by an inverted  Base Hydraulic System 2.5" Diameter Main Cylinder, 1-1/2" Diameter, Lip Cylinder, 1 HP Power Unit or  Hydra-Rite™ Hydraulic System 4" Diameter Main Cylinder, 2-1/2" Diameter Lip Cylinder, 1 HP Power Unit.  Non-adjustable hydraulic velocity fuse limits platform free fall to 3" (76mm).

**Combination Power Unit:**  STR-4200  VBR-600

**Remote Power Unit:**  Horizontal  Vertical

## Electrical/Controls

All controls are mounted in an interlock capable, NEMA 4X, gasketed control panel and enclosure assembly.

**Ship Controls w/ Leveler:**  Shipping Separately

Special CB Ordered  Combined CB Ordered

» **Informational signs/decals languages:**

French Canadian  English (Standard)

Portuguese  Spanish

All electrical components, connections and wiring are UL listed or recognized. The leveler requires a power source of:  110-120/1/60  208-240/1/60  575/3/60  208-240/3/60  440-480/3/60  208-240/1/50 (Int'l NO Euro)  380-415/3/50 (Int'l NO Euro)  380-415/3/50, 24V Coil (Euro Only)

### ITL(OHD Open/Raise Leveler):

ITL (OHD Oprtr to Oprt Leveler) Switch by Others

ITL (OHD Open to Oprt Leveler) Photoeye by RH®

ITL (OHD Open to Oprt Leveler) RH® Limit Switch

## Maintenance Features

**Integral Safe-T-Strut™ Maintenance Support System** extends through the lip and provides:  interior visual notification,  continuous protection even if impacted by a forklift and  lock out tag out.

**Maintenance Pendant Receptacle**

## Standard Warranty

Five-year parts and one-year labor warranty. All warranties subject to standard limitations on liability. 12-Month Limited Money-Back Guarantee of Customer Satisfaction\*. Up to 20-Year Money-Back Warranty based on the Dock Leveler Investment Guide (DLIG).

## Dock Leveler Investment Guide (DLIG)

Dock Leveler Investment Guide (DLIG)

**Max. Gross Load (1,000 lbs.):**  5  7.5  10  12.5

15  17  20 **Trucks/Day:**  0-8  9-16  17-24

## Specialty Leveler Features

**LGV / AGV Application**  **Self-Standing Frame**

**Abrasive Ramp Surface**  **Smooth Deck Lip**

**Emergency Stop**

**Reinforced Rear Frame (Specialty Floors)**

**Automatic Return To Dock (ARTD)**

### Cold Storage / Corrosive Applications

**Stainless Steel Hinge Pins**  **Zinc metalized finish**

**Insulation Options:**  Foam (Deck)  Foam (Deck & Stringers)\*\*  Thermal Paint Barrier (\*\*DLIG not avail. w/ foam options)

## Special Above Dock Service

**Above Dock Service** (Please see "Above Dock Service" supplement for additional specs / information)

## Client Info

Company Name \_\_\_\_\_

Date \_\_\_\_\_

**RITE-HITE**  
ALWAYS LOOKING AHEAD

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(1) "DOCK SHOCK: The Impact of Whole-Body Vibration on an Aging Workforce" (November 2013)

(2) Lavender, Ph.D., S., & Mehta, M.S., J. (2012). Ergonomic evaluation of new dock levelers on the tibial shock experienced by fork truck operators when loading and unloading trailers. Unpublished raw data, Institute for Ergonomics, Ohio State University, Columbus, OH.