

Architectural Specification

COLDSTORAGE™ Series Model NV Vertical Storing Hydraulic Dock Levelers

Available Capacities: 20,000 to 50,000 (5,000 lb. Increments)
Available Widths: 6', 6'6" & 7'
Available Lengths (Nominal): 5', 6' & 8'

SECTION 11161 DOCKLEVELERS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Factory assembled dockleveler with subframe, crossover lip, hydraulic activators, electric controls, and run-off prevention side guards.
- B. Curb angles and rear channel.
- C. Installation and Owner's Manual.

1.02 RELATED WORK

- A. Section 11160 - Truck Restraints.
- B. Section 11164 - Seals and Shelters.
- C. Section 11165 - Dock Bumpers.

1.03 REFERENCES

- A. ANSI/ASME MH 14.1 1987, "Loading Dock Levelers and Dockboards."

1.04 SYSTEM DESCRIPTION

- A. Hinged lip, hydraulic, vertical storing dock leveler to the following requirements:
 - 1. Nominal Size: (_____) wide x (_____) long.
 - 2. Capacity: (_____) lbs. per ANSI/ASME MH 14.1 1987.
 - 3. Service Range: Ten inches above dock level and six inches below dock level.

4. Velocity Fuse: Deck lock integral with lift cylinder to activate if a sudden loss of hydraulic pressure is detected.
5. Lip projection: 11 inches beyond front face of standard 4" bumpers with a 16" long lip.

1.05 SUBMITTALS

- A. Submit Manufacturer's installation instructions.
- B. Submit shop drawings showing pit dimensions, conduit positions and wiring schematics.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Vertical Storing Series - Model NV (_____) Pittsburgh Material Handling
PH: 888-557-1515 FAX: 888-564-2525

2.02 EQUIPMENT

- A. Curb angle (Optional): Leading edge 3 x 3 x 1/4 inch angle iron with concrete anchors to cover width of door opening.
- B. Rear Channel (Optional): Ten-inch channel eight feet long with concrete anchors.
- C. Dockleveler:
 1. Ramp: 50-55,000 psi-yield steel tread plate, reinforced with 50,000 psi-yield steel beams. Beams to be formed channel type 6" high with 2" top and bottom flanges for additional plate support. Unitized welded ramp to allow side-to-side tilt to follow uneven truck beds. Rear hinge to run full width of deck. Lip hinge lugs and header plate to beam connections to be continuously welded. Front and rear hinge rods to be zinc plated SAE 1045 factory coated with anti-seize lubricant. Side run off guards to be 4 inches high welded to each side of deck. Ramp to have center deck beam for additional plate support.
 2. Lip: 50-55,000-psi yield tread plate and lugs. Lugs to be continuously welded to lip plate. Plate to be full width of deck, non-tapered with leading edge chamfer to be milled at maximum 15 degrees.
 3. Subframe: Welded assembly to have a rear structural angle, five solid steel upright supports.
 4. Lock & Warning System: Provide a vertical storing lock and warning system to alert operator if not properly engaged. A safe stored position light to be provided on the control panel cover. Unit must be powered and manually unlocked to allow lowering. Lowering must be operator controlled.

5. Hydraulic System: Ramp and lip to be powered by regenerative hydraulic cylinders with hard chrome plated and polished rod, guide bearings, and high-pressure seals. Ramp cylinder housing to be connected to deck with rod extending downward to prevent debris from collecting and allow self-bleeding. Ramp cylinder to be equipped with velocity fuse to stop downward deck movement in the event of sudden loss of pressure. Integral power unit with filters, valves, pump and oil reservoir as required. Hoses to be SAE 100R2 high-pressure with factory crimped fittings.
6. Motor and Controls: Hydraulic pump powered by 1 HP totally enclosed non-ventilated type motor. Control box to have NEMA 12 dust tight enclosure containing motor starter and single push-button. Control panel to be UL/CSA approved.
7. Finish: All surfaces to be degreased and painted with high solid machinery enamel. Provide standard manufacturer's color.
8. Warranty: Submit a guarantee from the manufacturer covering the structural components of the dock leveler for ten years, the front and rear hinge assemblies for twenty years and the hydraulic components for five years from date of acceptance. All other components to be covered with a one -year guarantee against defects in material and workmanship.

PART 3 EXECUTION

3.01 PREPARATION

- A. Provide curb angle for setting pit edges. (Optional)
- B. Provide rear channel for setting rear pit support. (Optional)

3.02 INSTALLATION

- A. Install in prepared pit in accordance with manufacturer's instructions.
- B. Adjust installed unit for operation as specified by Manufacturer.