



## LOADING DOCK EQUIPMENT

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Loading dock equipment of the following types:
  - 1. Dock levelers.
  - 2. Control stations.

#### 1.2 RELATED SECTIONS

- A. Section 03100 - Concrete Forms and Accessories: Placement of anchors into concrete.
- B. Section 03300 - Cast-In-Place Concrete: Docks and pits.
- C. Section 05500 - Metal Fabrications: Metal angles for edge of dock.

#### 1.3 REFERENCES

- A. American National Standards Institute (ANSI):
  - 1. ANSI MH30.1- Industrial Loading Dock Boards (Ramps).
  - 2. ANSI MH29.1- Industrial Scissor Lifts.
  - 3. ANSI MH30.3- Vehicle Restraining Devices (Safety, Performance, and Testing)

#### 1.4 SUBMITTALS

- A. Section 01330 - Submittals Procedures: Procedures for submittals.
- B. Product Data: For each product specified.
  - 1. Bumpers: Indicate unit dimensions, method of anchorage, and details of construction.
  - 2. Levelers: Indicate materials and finish, installation details, roughing-in measurements, and operation of unit.
- C. Shop Drawings:
  - 1. Indicate required opening dimensions, tolerances of opening dimensions, placement dimensions, and perimeter conditions of construction.
  - 2. Wiring diagrams including location of control stations and disconnect switches.
- D. Assurance/Control Submittals:
  - 1. Certificates: Manufacturer's certificate that Products meet or exceed specified requirements.
  - 2. Qualification Documentation: Submit documentation of experience indicating compliance with specified qualification requirements.

#### 1.5 QUALITY ASSURANCE

- A. Dock Levelers: Conform to requirements of ANSI MH30.1.

- B. Vehicle Restraining Devices: Conform to requirements of ANSI MH30.3.
- C. Manufacturer Qualifications:
  - 1. Manufacturer specializing in manufacturing Products specified with minimum 30 years' experience.
  - 2. Manufacturer to have quality assurance improvement programs.
  - 3. Manufacturer shall be associated with Loading Dock Equipment Manufacturers (LODEM) setting ANSI standards.
  - 4. Manufacturers welding procedure compliant with A.W.S.D1 .1 specifications.
- D. Installer Qualifications: Company specializing in performing the Work of this Section with minimum 5 years' experience.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01600 - Product Requirements: Transporting, handling, storage, installation and protection of products.

#### 1.7 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Blue Giant Equipment Corp., which is located at:  
85 Heart Lake Rd. S., Brampton, ON, Canada L6W 3K2  
Toll Free Tel: 800-668-7078 Tel: 905-457-3900  
Email: [marketing@bluegiant.com](mailto:marketing@bluegiant.com)  
Web: [www.BlueGiant.com](http://www.BlueGiant.com)

#### 2.2 HYDRAULIC DOCK LEVELERS

- A. **Hydraulic Dock Levelers:** 'A' Series Dock Levelers, Model 'HA' as manufactured by BLUE GIANT.
  - 1. **Type:** Recessed, pit installed hinged dock leveler. Electro-hydraulically operated dock leveler complete with hydraulic lip and deck cylinders and 4 inches (101 mm) assured motion float (maintained deck tilt). Pit Depth: Front 20 inches (508 mm) and Rear 19-1/2 inches (495 mm). Deck length includes 16 inches (406 mm) lip.
    - a. Model HA6006: Deck Size - 72 inches (1829 mm) W by 75-1/2 inches (1918 mm) L.
    - b. Model HA6008: Deck Size - 72 inches (1829 mm) W by 99-1/2 inches (2527 mm) L.
    - c. Model HA6010: Deck Size - 72 inches (1829 mm) W by 123-1/2 inches (3137 mm) L.
    - d. Model HA6012: Deck Size - 72 inches (1829 mm) W by 147-1/2 inches (3747 mm) L.
    - e. Model HA6606: Deck Size - 78 inches (1981 mm) W by 75-1/2 inches (1918 mm) L.
    - f. Model HA6608: Deck Size - 78 inches (1981 mm) W by 99-1/2 inches (2527 mm) L.
    - g. Model HA6610: Deck Size - 78 inches (1981 mm) W by 123-1/2 inches (3137 mm) L.
    - h. Model HA6612: Deck Size - 78 inches (1981 mm) W by 147-1/2 inches (3747 mm) L.

- i. Model HA7006: Deck Size - 83 inches (2108 mm) W by 75-1/2 inches (1918 mm) L.
  - j. Model HA7008: Deck Size - 83 inches (2108 mm) W by 99-1/2 inches (2427 mm) L.
  - k. Model HA7010: Deck Size - 83 inches (2108 mm) W by 123-1/2 inches (3137 mm) L.
  - l. Model HA7012: Deck Size - 83 inches (2108 mm) W by 147-1/2 inches (3747 mm) L.
- 2. Function:**
- a. Vertical Travel: Working range of 12 inches (305 mm) above and 12 inches (305 mm) below dock level.
  - b. Automatic Vertical Compensation: Unit provides float of 12 inches (305 mm) above and 12 inches (305 mm) below dock level.
  - c. Automatic Lateral Compensation: Provides maintained side-to-side deck tilt of up to 4 inches (102 mm) to compensate for canted truck beds.
- 3. Operation:**
- a. Hydraulic Operating System: Easy to operate, quiet and smooth cycling. Electro-hydraulic raising and hydraulic lowering of the dock leveler controlled from a remote pushbutton station. Includes means of lowering the dock leveler below platform level with lip retracted behind dock bumpers. The loaded ramp's free fall is limited to not over 3 inches (76 mm) by a hydraulic velocity fuse. Unit shall come complete with a 1HP TENV motor and equipped with overload protection. Power pack mounted underneath the deck.
  - b. Control Station: Model SP1. Remote push-button control station. Provide a single push button control station with constant pressure "I" (UP) button. Control station is NEMA4X / IP65 rated, 3-1/4 inch W x 6-1/2 inch W x 5-1/8 inch D (83 mm x 165 mm x 130 mm) in size (standard).
- 4. Rated Capacity:**
- a. Welding procedure compliant with ANSI AWS D1.1 (2008) specifications. All units rated in compliance with ANSI MH30.1 (2007). ANSI/NFPA70 approved electrical components. Dock Leveler capacities available from 30,000lb to 80,000lb (13,636 kg to 36,288 kg). Structural deck support to include minimum six each high-tensile
- 5. Power:** \_\_\_ V, \_\_\_ Amps, \_\_\_ Phase.
- 6. Standard Safety Devices:**
- a. Full operating range metal toe guard protection.
  - b. Hydraulic velocity fuse "fall safe" to limit free fall up to 3 inches (76 mm).
  - c. Cross traffic support - lip engaged in saddles.
  - d. Corner safety stops.
  - e. Telescopic v-grooved maintenance strut, integral to unit.
  - f. Beveled lip.
- 7. Finish and Color:**
- a. Dock Levelers: Toe guards painted safety yellow as specified by ANSI Z535.1. High visibility OSHA safety striping on stationary side toe guards.
- 8. Warranty:** Warranties are subject to standard limitations on liability. Consult manufacturer for full details on warranty information and product registration.
- 9. Standard Accessories:**
- a. Night Locks.
  - b. Two model DB411 laminated bumpers 14 inches W by 10 H by 4.5

- inches D (355 by 254 by 114mm).
- c. 16 inch (406 mm) long lip (standard on capacities up to and including 50,000 lbs / 22,727 kgs).
- d. 18 inch (457 mm) long lip (standard on capacities from 50,000 lbs / 22,727 kgs to 80,000 lbs / 36,363 kgs).

10. **Optional Accessories:**

- a. Foam insulation underside of deck.
- b. Remote mounted power pack on 18 feet (5486 mm) hydraulic hose.
- c. Pour-in pan (dock leveler welded to a steel pan, allowing it to be "poured in place" after concrete slab is poured).
- d. Clean pit frame.
- e. Three wheel forklift center deck support, up to 45,000 lb (20,412 kg) capacity.  
Arctic oil (temperature range of -57 to 150 degrees C).
- f. Biodegradable oil (temperature range of -36 to 230 degrees C) in lieu of standard hydraulic oil.
- g. Dock lip safety barrier (5" / 127mm steel barrier extending above the deck surface when the dock is not in use, preventing warehouse traffic from rolling off the edge of the dock).
- h. 18" (457mm) long lip
- i. 20" (508mm) long lip
- j. 24" (610mm) long lip
- k. Blue Genius™ advanced communication package (includes LED interior red/yellow/green and exterior red/green traffic lights and driver warning signs)

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Section 01700 - Execution Requirements: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

### 3.2 INSTALLATION

- A. Install dock leveler and/or dock lift unit in prepared opening in accordance with manufacturer's instructions.
- B. Set square and level.
- C. Anchor unit securely, flush with dock. Weld back of dock leveler to pit frame. Touch-up welds with matching paint.
- D. Install dock bumpers in accordance with manufacturer's instructions.

### 3.3 ADJUSTING

- A. Adjust installed unit for smooth and balanced operation.

END OF SECTION