



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
Web: www.BlueGiant.com

2.2 AIR-POWERED DOCK LEVELERS

- A. Air Powered Dock Levelers: ABU Series Dock Levelers as manufactured by BLUE GIANT.
 - 1. Type: Recessed, pit installed hinged airbag dock leveler. Air-powered and rear fixed hinge with 4 inches (101 mm) lateral ramp flex. Pit Depth: 24 inches (610mm) and rear 23.5 inches (597mm). Deck length includes 16 inches (406 mm) lip.
 - a. Model ABU6006: Deck Size - 72 inches (1829 mm) W by 75-1/2 inches (1918 mm) L. Pit - 74 inches (1878 mm) W by 61-1/4 inches (1556 mm) L.
 - b. Model ABU6008: Deck Size - 72 inches (1829 mm) W by 99-1/2 inches (2527 mm) L. Pit - 74 inches (1878 mm) W by 85-1/4 inches (2165 mm) L.
 - c. Model ABU6606: Deck Size - 78 inches (1981 mm) W by 75-1/2 inches (1918 mm) L. Pit - 80 inches (2032 mm) W by 61-1/4 inches (1556 mm) L.
 - d. Model ABU6608: Deck Size - 78 inches (1981 mm) W by 99-1/2 inches (2527 mm) L. Pit - 80 inches (2032 mm) W by 85-1/4 inches (2165 mm) L.
 - e. Model ABU7006: Deck Size - 83 inches (2108 mm) W by 75-1/2 inches (1918 mm) L. Pit - 85 inches (2159 mm) W by 61-1/4 inches

- (1556 mm) L.
- f. Model ABU7008: Deck Size - 83 inches (2108 mm) W by 99-1/2 inches (2427 mm) L. Pit - 85 inches (2159 mm) W by 85-1/4 inches (2165 mm) L.

B. 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: Leveler shall have deck flex up to 4 inches (101 mm) to compensate for non-level trailer beds. Rear hinge is fixed and does not come up above floor level.

2. Operation:

- a. Air-Powered System: Smooth cycling. Airbags inflate and deflate, raising and lowering the dock leveler. Unit is controlled by a remote single push button control station. Includes means of lowering the dock leveler below platform level with lip retracted behind dock bumpers. Mechanical fall safe legs limit free fall and below level lip control is available for end-loading. Unit shall come complete with a single phase blower motor. Air power pack is pit-mounted. All 6 feet (1829 mm) long docks use 3/16 inch (4.8 mm) diameter cable. All 8 feet (2438 mm) long docks use 1/4 inch (6 mm) diameter cable. There is one main balance spring for all 6 feet (1829 mm) long docks; two main springs for all 8 feet (2438 mm) long docks.
- b. Control Station: Model SP2. Remote push-button control station. Provide a single push button control station with constant pressure UP button. The running timer shuts down the motor after a specific interval to prevent excessive motor activity. Onboard diagnostics alert user to equipment status via a red LED light inside the control box. Control station is NEMA4X / IP65 rated, 5 15/16 inches L x 6 15/32 inches W x 4 inches D (151 x 164 x 102 mm).

3. 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 45,000lb (13,636 kg to 20,412 kg). Structural deck support to include minimum six each high-tensile

4. Power: Two ranges available: 115V / 1PH Range: 110-130V / 50-60Hz.
230V / 1PH Range: 208-240V / 50-60Hz.

5. Standard Safety Devices:

- a. Full operating range metal toe guard protection.
- b. Mechanical fall safe legs to limit free fall and below level lip control for end-loading.
- c. Cross traffic support - lip engaged in saddles.
- d. Corner safety stops.
- e. Telescopic V-grooved maintenance strut, integral to unit.
- f. Beveled lip.

6. 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.
7. Warranty: Warranties are subject to standard limitations on liability. Consult manufacturer for full details on warranty information and product registration.
 8. 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
 9. Optional Accessories:
 - a. Foam insulation underside of deck.
 - b. Clean Pit Frame.
 - c. 18" (457mm) long lip
 - d. 20" (508mm) long lip
 - e. Three wheel forklift center deck support, up to 45,000 lb (20,412 kg) capacity.
 - f. Blue Genius advanced communication package (includes LED interior red/yellow/green and exterior red/green traffic lights and driver warning signs)
 - g. Overhead door interlock.
 - h. Audible alarm.
 - i. Side and rear rubber style weather seals
 - j. Side and rear brush style weather seals

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