

BLUE GIANT[®]
BLUE GIANT EQUIPMENT CORPORATION
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 VERTICAL DOCK LEVELERS

- A. Vertical Storing Hydraulic Dock Levelers: "U" Series Hydraulic Dock Levelers, Model 'VU' as manufactured by BLUE GIANT.
 - 1. Type: Recessed, pit installed hinged dock leveler in vertical storing. Electro-hydraulically operated with independent control of deck and lip complete with hydraulic lip and deck cylinders and fixed rear hinge. Pit depth, front 11-1/4 inches (286 mm) and rear 10-3/4 inches (273 mm). Deck length includes 20 inches (508 mm) lip.
 - a. Model VU6005: Deck Size - 72 inches (1829 mm) W by 60 inches (1524 mm) L. Pit - 45-1/2 inches (1156 mm) L.
 - b. Model VU6006: Deck Size - 72 inches (1829 mm) W by 72 inches (1829 mm) L. Pit - 57-1/2 inches (1461 mm) L.
 - c. Model VU6606: Deck Size - 78 inches (1981 mm) W by 72 inches (1829 mm) L. Pit - 57-1/2 inches (1461 mm) L.
 - d. Model VU7006: Deck Size - 83 inches (2108 mm) W by 72 inches (1829 mm) L. Pit - 57-1/2 inches (1461 mm) L.
 - e. Model VU7008: Deck Size - 83 inches (2108 mm) W by 96 inches (2438 mm) L. Pit - 81-1/2 inches (2070 mm) L.
 - 2. Function:
 - a. Vertical Travel: Working range of 12 inches (305 mm) above and 6 inches (152 mm) below dock level.
 - b. Automatic Vertical Compensation: Unit provides electronic

compensation float of 12 inches (305 mm) above and 6 inches (152 mm) below dock level.

- c. Lip Operation: Hydraulically powered lip (regenerative cylinder) controlled independently of main deck (double acting) cylinder. Lip will yield under impact of incoming truck. The length of the lip extension shall not be less than 16 inches (406 mm) from the ramp edge.

3. Operation:

- a. Operating System: 1/2 HP self-contained power pack. 24V control, NEMA4X/IP65 (Wet and corrosion resistant) rated control station with touch buttons for engage or disengage or reset of restraint. Onboard diagnostics and communications feature a user-friendly, LCD intelligent display and keypad with supervisory override features. Stop button provides complete motion freeze of restraint and interlocked components. Hydraulic Operating System: Easy to operate, quiet and smooth cycling. Electro-hydraulic raising and hydraulic lowering of the dock leveler controlled from a remote control 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 motor. Remote power pack.
- b. Control Station: Remote touch button control station. The Blue Genius Gold Series I is a multiple touch-button control station with constant pressure "DECK", "LIP", and "DOWN" touch buttons. It has a NEMA4X/IP65 (wet and corrosion resistant) rated polycarbonate enclosure. Overall dimensions 11 1/4"L x 7 1/2"W x 5 1/2"D (286 x 191 x 140 mm). For added safety, the control station has a 'STOP' touch button that will cause the deck and lip to stop in mid-travel when touched. The 'ESC' touch button activates the release function.

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

5. Power: ___ V, ___ Amps, ___ Phase.

6. Standard Safety Devices:

- a. 3 inch (76 mm) high run off guards
- b. Hydraulic fall safe (velocity fuse) to limit free fall.
- c. Maintenance stand that supports deck and enables safe under-deck inspections and maintenance.
- d. Beveled lip.

7. Finish and Color:

- a. Unit painted blue. High visibility OSHA safety striping on beveled toe guards at sides.

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 DB412W laminated bumpers 14 inches W by 20 inches H by 4.5 inches D (355 by 508 by 114 mm).
 - c. Two 701-VE412W-11 vertical bumper riser mountings, 11 inches (279 mm).
 - d. 16 inch (406 mm) long lip (standard on capacities up to and including 50,000 lbs / 22,727 kgs).

10. Optional Accessories:
 - a. Hot dipped galvanizing (deck and rear frame)
 - b. Stainless steel lip and rear hinge pins
 - c. Three wheel forklift center deck support
 - d. Blue Genius advanced communication package (includes LED interior red/yellow/green and exterior red/green traffic lights and driver warning signs).
 - f. Standard oil (temperature range of -41 to 200 degrees C).
 - g. Arctic oil (temperature range of -57 to 150 degrees C).
 - h. Biodegradable oil (temperature range of -36 to 230 degrees C) in lieu of standard hydraulic oil.

2.3 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.

2.4 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.

- D. Install dock bumpers in accordance with manufacturer's instructions.

2.5 ADJUSTING

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

END OF SECTION