



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 'VL' 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. Remote wall-mounted power pack. Pit depth, front 12 inches (305mm) and rear 12 inches (305mm). Deck length includes 20 inches (508mm) lip.
 - a. Model VL6006: Deck Size - 72 inches (1829mm) W by 72 inches (1829mm) L. Pit - 57-1/2 inches (1461mm) L.
 - b. Model VL6008: Deck Size - 72 inches (1829mm) W by 96 inches (2438mm) L. Pit - 81-1/2 inches (2070mm) L.
 - c. Model VL6606: Deck Size - 78 inches (1981mm) W by 72 inches (1829mm) L. Pit - 57-1/2 inches (1461mm) L.
 - d. Model VL6608: Deck Size - 78 inches (1981mm) W by 96 inches (2438mm) L. Pit - 81-1/2 inches (2070mm) L.
 - e. Model VL7006: Deck Size - 83 inches (2108mm) W by 72 inches (1829mm) L. Pit - 57-1/2 inches (1461mm) L.
 - f. Model VL7008: Deck Size - 83 inches (2108mm) W by 96 inches (2438mm) L. Pit - 81-1/2 inches (2070mm) L.
 2. Function:
 - a. Vertical Travel (for docks with standard 16 inch / 406mm lip): Working range for 6' docks is 9 inches (229mm) above and 7.5 inches (191mm) below dock level. Working range for 8' docks is 13 inches (330mm) above and 7 inches (178mm) below dock level.
 - b. Automatic Vertical Compensation (for docks with standard 16 inch / 406mm lip): Unit provides full electronic float of 9 inches (229mm) above and 7.5 inches (191mm) below dock level for 6' docks and 13

- inches (330mm) above and 7 inches (178mm) below for 8' docks
 - c. Lip Operation: Hydraulically powered lip 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 (406mm) from the ramp edge.
- 3. Operation:
 - a. Operating System: 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 halts the dock in mid-travel. 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. SoftPark™ protective cushioning safeguards the deck cylinder while the unit is being parked. Specially designed inclinometer's IntelliTilt™ feature supports greater accuracy in deck positioning. SmartFloat™ positioning technology allows the deck to match trailer movement during loading and unloading. EasyClean™ deck hinge configuration eliminates dirt entrapment points, preserving hygiene levels and enabling smooth cross-docking at any grade angle.
 - b. The loaded ramp's free fall is limited to not over 3 inches (76mm) by a hydraulic velocity fuse. Unit shall come complete with a 1HP motor. Remote power pack is standard.
 - c. 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 111/4"L x 71/2"W x 51/2"D (286 x 191 x 140mm). For added safety, the LED control station lights (red / green / yellow) signal safety conditions to dock personnel and a 'STOP' touch button 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 (76mm) 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. Integral safety stand for additional security during under-deck repairs and servicing
 - e. 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 DB412WR-12 laminated bumper with brackets
 - c. 16 inch (406mm) long lip
 - d. Standard oil
10. Optional Accessories:
 - a. Self-contained power pack
 - b. Post-mounted power pack
 - c. Draft pad
 - d. Hot dipped galvanizing (deck and / or rear frame)
 - e. Stainless steel lip pins
 - f. Stainless rear hinge pins
 - g. Three wheel forklift center deck support
 - h. Wall-mounted lip keepers
 - i. Embedded 15 inch (381mm) deep back frame
 - j. Weld-on back frame (13" or 15")
 - k. Blue Genius advanced communication package for verticals (consists of exterior red/green traffic lights and driver warning sign).
 - f. Arctic oil
 - g. Biodegradable 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