



BLUE GIANT EQUIPMENT CORPORATION

LOADING DOCK EQUIPMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Loading dock equipment of the following types:
 - 1. Dock bumpers.
 - 2. Dock safety packages.
 - 3. 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 and ISO certified.
 - 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 DOCK SAFETY PACKAGES

- A. Hydraulic, XDS Series 2000 as manufactured by BLUE GIANT.
 - 1. Dock Leveler: Recessed, pit installed hinged dock leveler comes with automatically operated roll off guard/barrier. Electro-hydraulic operated with independent control of deck and lip.
 - 2. Door and Dock Guard: Electro-hydraulic operated solid steel barrier incorporated into the deck. Designed to protect forklifts from accidental roll-off when the overhead door is open, and protects overhead door panels and tracks from impact damage when the door is closed. Overall dimension is 7.5 inch (190 mm) high x full width of deck less 6 inches per side x minimum 3/8 inch thick high tensile steel checker plate.
 - a. Model XDS2066: 6 feet (1829 mm) W by 75-1/2 inches (1918 mm) L.
 - b. Model XDS2068: 6 feet (1829 mm) W by 99-1/2 inches (2527 mm) L.
 - c. Model XDS20610: 6 feet (1829 mm) W by 123-1/2 inches (3137 mm) L.
 - d. Model XDS20612: 6 feet (1829 mm) W by 147-1/2 inches (3747 mm) L.
 - e. Model XDS20666: 6 feet-6 inches (1981 mm) W by 75-1/2 inches (1918 mm) L.
 - f. Model XDS20668: 6 feet 6 inches (1981 mm) W by 99-1/2 inches (2527 mm) L.

- g. Model XDS206610: 6 feet 6 inches (1981 mm) W by 123-1/2 inches (3137 mm) L.
- h. Model XDS206612: 6 feet 6 inches (1981 mm) W by 147-1/2 inches (3747 mm) L.
- i. Model XDS2076: 6 feet 11 inches (2108 mm) W by 75-1/2 inches (1918 mm) L.
- j. Model XDS2078: 6 feet 11 inches (2108 mm) W by 99-1/2 inches (2527 mm) L.
- k. Model XDS20710: 6 feet 11 inches (2108 mm) W by 123-1/2 inches (3137 mm) L.
- l. Model XDS20712: 6 feet 11 inches (2108 mm) W by 147-1/2 inches (3747 mm) L.

3. Operation:

- a. Dock Leveler: Hydraulic Operating System: Easy to operate, quiet and smooth cycling. Electro-hydraulic raising and hydraulic lowering of the dock leveler controlled from a remote multi 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 motor. Power pack mounted underneath the deck.
- b. Door and Dock Guard: Hydraulic Operating System: Easy to operate, quiet, smooth and automatic cycling. Door and Dock Guard is kept in the upright position by upward biased spring tension and is retracted with power down hydraulics. Upon cycling of the dock leveler, the guard automatically retracts and lies flush with the deck, providing unobstructed flow of traffic. When the dock is cycled and returned to the stored position, the guard automatically returns to the upright position. Supervisor override keypad with indicator light is provided on the control station for end-loading and ground level hand bombing requirements.
- c. Control Station: Remote touch button control station; The Blue Genius Gold Series III is a multiple touch-button control station with constant pressure "DECK", "LIP", "DOWN", "ENGAGE", and "RELEASE" 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 equipment to stop in mid-travel when touched. The 'ESC' touch button activates the release function.
- d. Lights Communication System: The lights communication system consists of LED red/yellow/green lights mounted on the control station and a set of exterior red/green traffic lights mounted on exterior wall, on the driver's side of the dock entrance. The lighting system alerts both dock attendant and vehicle driver to the status of the dock leveler. Interior override indicator light for door and dock guard to signal guard is temporarily down during unique loading/offloading applications.

4. Dock Leveler 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 vehicle

- beds.
- d. Lip Operation: Hydraulically powered lip, controlled independently of main deck cylinder. Lip will yield under impact of incoming vehicle and will automatically drop pendant upon vehicle's departure. The length of the lip extension shall not be less than 16 inches (406 mm) from the ramp edge.
 - e. Stop Button Function: For added safety, the control station has a 'STOP' touch button that will cause the deck and lip to stop in mid-motion when touched. The 'ESC' touch button activates the release function.
5. Rated Capacities:
- a. Welding procedure compliant with A.W.S.D1 .1 specifications. All units rated in compliance with ANSI MH30.1(2007). Structural deck support to include minimum six each high-tensile solid steel I-beam members. Guard rated to stop 10,000 lb (4,545 kg) rolling loads at 4 MPH (6 KMH).
 - b. Capacity: 30,000 lb (13,608 kg).
 - c. Capacity: 35,000 lb (15,909 kg).
 - d. Capacity: 40,000 lb (18,144 kg).
 - e. Capacity: 50,000 lb (22,680 kg).
 - f. Capacity: 60,000 lb (27,216 kg).
 - g. Capacity: 80,000 lb (36,288 kg).
6. Power: ___ V, ___ Amps, ___ Phase.
7. Safety Devices:
- a. Full operating range metal toe guard protection painted in high visibility colors.
 - 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.
 - g. Blue Genius advanced communication package (includes LED interior red/yellow/green and exterior red/green traffic lights and driver warning signs).
 - h. Door interlock terminals, 24VDC provided.
8. Finish and Color:
- a. Dock Leveler: Toe guards painted safety yellow as specified by ANSI Z535.1. High visibility OSHA safety striping on stationary side toe guards.
 - b. Exterior LED Traffic Lights: Housing shall be one-piece, weatherproof constructed and made of ultra high molecular weight plastic. The lights shall be 4 inch (102 mm) diameter of red and green color. Overall body 5 inches W x 11-1/2 inch L x 1/2 inch D (127 x 292 x 13 mm) in size.
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).
10. Optional Accessories:
- a. Foam insulation underside of deck

- b. Pour-in pan (dock leveler welded to a steel pan, allowing it to be "poured in place" after concrete slab is poured)
- c. Clean pit frame.
- d. Three wheel forklift center deck support
- e. Audible alarm.
- f. Overhead door interlock photo sensor (24VDC).

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