

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. Scissor Lifts: Conform to requirements of ANSI MH29.1.
- C. Vehicle Restraining Devices: Conform to requirements of ANSI MH30.3.

- D. 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.
- E. 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 Corporation, which is located at: 410 Admiral Blvd.; Mississauga, ON, Canada L5T 2N6; Toll Free Tel: 800-872-2583; Tel: 905-457-3900; Fax: 905-457-2313; Email: marketing@bluegiant.com; Web: <https://www.bluegiant.com>

2.2 AIR-POWERED DOCK LEVELERS

- A. Air Powered Dock Levelers: Dock Levelers, Model A, as manufactured by Blue Giant.
- 1.Type: Recessed, pit installed hinged dock leveler. Electro-pneumatic operated by control of deck and lip with air power and rear fixed hinge with 4 inches (102 mm) lateral ramp flex. Clean pit frame.
 - a.Pit Depth: 20 inches (508 mm) and rear 19-1/2 inches (495 mm).
 - b.Deck length includes 16 inches (406 mm) lip.
 - c.Model A6006:
 - 1)Deck Size (WxL): 72 x 75-1/2 inches (1829 x 1918 mm).
 - 2)Pit Size (WxL): 74 x 63 inches (1880 x 1600 mm).
 - d.Model A6008:
 - 1)Deck Size (WxL): 72 x 99-1/2 inches (1829 x 2527 mm).
 - 2)Pit Size (WxL): 74 x 87 inches (1880 x 2210 mm).
 - e.Model A6010:
 - 1)Deck Size (WxL): 72 x 123-1/2 inches (1829 x 3137 mm).
 - 2)Pit Size (WxL): 74 x 111 inches (1880 x 2819 mm).
 - f.Model A6606:
 - 1)Deck Size (WxL): 78 x 75-1/2 inches (1981 x 1918 mm).
 - 2)Pit Size (WxL): 80 x 63 inches (2032 x 1600 mm).
 - g.Model A6608:
 - 1)Deck Size (WxL): 78 x 99-1/2 inches (1981 x 2527 mm).
 - 2)Pit Size (WxL): 80 x 87 inches (2032 x 2210 mm).
 - h.Model A6610:
 - 1)Deck Size (WxL): 78 x 123-1/2 inches (1981 x 3137 mm).
 - 2)Pit Size (WxL): 80 x 111 inches (2032 x 2819 mm).
 - i.Model A7006:

- 1)Deck Size (WxL): 83 x 75-1/2 inches (2108 x 1918 mm).
 - 2)Pit Size (WxL): 85 x 63 inches (2159 x 1600 mm).
 - j.Model A7008:
 - 1)Deck Size (WxL): 83 x 99-1/2 inches (2108 x 2527 mm).
 - 2)Pit Size (WxL): 85 x 87 inches (2159 x 2210 mm).
 - k.Model A7010:
 - 1)Deck Size (WxL): 83 x 123-1/2 inches (2108 x 3137 mm).
 - 2)Pit Size (WxL): 85 x 111 inches (2159 x 2819 mm).
- 2.Function:
- a.Vertical Travel: Working range of 12 inches (305 mm) above and 7 inches (178 mm) to 9 inches (279 mm) (varies on model) below dock level.
 - b.Automatic Vertical Compensation: Float of 12 inches (305 mm) above and below dock level (varies on model).
 - c.Automatic Lateral Compensation: Leveler shall have deck flex up to 4 inches (102 mm) to compensate for non-level trailer beds. Rear hinge fixed and does not come up above floor level.
 - d.Lip Operation: Powered lip automatically extends and locks into position. Lip yields under impact of incoming truck and automatically drops pendant upon truck's departure. Length of lip extension not less than 16 inches (406 mm) from ramp edge.
- 3.Operation:
- a.Air-Powered System: Smooth cycling. Controlled by a remote single push button control station.
 - 1)Airbags inflate and deflate, raising and lowering dock leveler and controlling lip deployment.
 - 2)Includes means of lowering dock leveler below platform level with lip retracted behind dock bumpers.
 - 3)Mechanical fall safe legs limit free fall and below level lip control is available for end-loading.
 - 4)Motor: ¼ HP (0.18 kW) Single phase blower motor.
 - 5)Pit-mounted air power unit underneath deck.
 - b.Control Station:
 - 1)Enclosure: NEMA 4X/IP65, wet and corrosion resistant, rated polycarbonate.
 - 2)Model SP1: Remote push-button control station. Provide single push button control station with constant pressure I or UP button.
 - a)Size (WxHxD): 3-1/4 x 6-1/2 x 5-1/8 inch (83 x 165 x 130 mm).
 - 3)Model SP2: Remote push-button control station. Provide single push button control station with constant pressure UP button.
 - a)Size (WxHxD): 5-15/16 x 6-15/32 x 4 inches (151 x 164 x 102 mm).
 - b)Running timer shuts down motor after specific interval to prevent excessive motor activity.
 - c)Onboard diagnostics alert user to equipment status via red LED light inside the control box.
 - 4)Blue Genius Gold Series I: Multiple touch-button control station with constant pressure DECK and LIP touch buttons.
 - a)Size (LxWxD): 11-1/4 x 7-1/2 x 5-1/2 inches (286 x 191 x 140 mm).
 - b)STOP touch button causes the deck and lip to stop in mid-travel when touched, for added safety.
 - c)ESC touch button activates release function.
 - 5)Blue Genius Gold Series III Control Panel: Multiple touch-button control station with constant pressure DECK, LIP, ENGAGE, and RELEASE touch buttons. Interlocks dock leveler and restraint functions.
 - a)Size (LxWxD): 11-1/4 x 7-1/2 x 5-1/2 inches (286 x 191 x 140 mm).
 - b)STOP touch button limits equipment motion when touched, for added safety.

- c)ESC touch button activates release function.
- 6)Blue Genius Platinum Series Master Control Panel: Controls combination of dock equipment including dock leveler, vehicle restraint, overhead doors, dock light and inflatable seal. Software based operating sequence can be customized to suit application requirements.
 - a)Size (LxWxD): 20.59 x 14 x 5-1/2 inches (523 x 356 x 140 mm).
 - b)Equipment controlled via touch buttons that correspond to the equipment's function.
 - c)STOP touch button halts or limits the motion of connected dock equipment, for added safety.
- 4.Rated Capacity:
 - a.Welding procedure compliant with ANSI AWS D1.1.
 - b.All units rated in compliance with ANSI MH30.1.
 - c.ANSI/NFPA 70 approved electrical components.
 - d.Structural deck support to include minimum eight each high-tensile solid steel J-beam members.
 - e.Rated Capacity: Workhorse class, ANSI MH30.1, 12,500 lbs (5,700 kg).
 - f.Rated Capacity: Heavy class, ANSI MH30.1, 19,000 lbs (8,700 kg).
 - g.Rated Capacity: Super class, ANSI MH30.1, 26,000 lbs (11,800 kg).
 - h.Daily Usage: 8 Full Truck Loads (FTL) or as indicated.
- 5.Power: ¼ HP (0.18 kW) rated at 110-130 V, 50-60 Hz, single phase.
- 6.Power: ¼ HP (0.18 kW) rated at 208-240 V, 50-60 Hz, single phase.
- 7.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.V-grooved maintenance strut, integral to unit.
 - f.Beveled lip.
- 8.Finish and Color:
 - a.Powder Coated and baked cure, resistant to chemicals, corrosion, and incorporates UV inhibitors to reduce fading of colors.
 - b.Finish for Deck, Lip, and Frame: Powder coated, blue.
 - c.Finish for Deck, Lip, and Frame: Powder coated, blue with non-slip grit.
 - d.Finish for Deck, Lip, and Frame: Powder coated, grey.
 - e.Finish for Deck, Lip, and Frame: Powder coated, grey with non-slip grit.
 - f.Finish for Deck, Lip, and Frame: Powder coated, black.
 - g.Finish for Deck, Lip, and Frame: Powder coated, black with non-slip grit.
 - h.Finish for Deck, Lip, and Frame: Powder coated, custom color _____.
 - i.Finish for Deck, Lip, and Frame: Galvanized coated.
- 9.Finish and Color:
 - a.Zinc enriched powder for added corrosion protection in moist environments.
 - b.Toe guards painted safety yellow per ANSI Z535.1. High visibility OSHA safety striping on stationary side toe guards.
- 10.Warranty: Subject to standard limitations on liability. Consult manufacturer for full details on warranty information and product registration.
- 11.Night Locks. Resist unauthorized entry beneath locked overhead door.
- 12.Dock Bumpers: Standard, two model DB411WB laminated bumpers.
 - a.Size (WxHxD): 11-1/2 x 10 x 4-1/2 inches (292 x 254 x 114 mm). One Weld side and one Bolt Flange side.
- 13.Lip Extensions:
 - a.Lip Extensions: 16 inch (406 mm) from the ramp edge.
 - b.Lip Extensions: 18 inch (457 mm) long lips

- c.Lip Extensions: 20 inch (508 mm) long lips
 - d.Lip Extensions: Tapered Lip for 72 inches (1829 mm) and 78 inches (1981 mm) wide models.
 - e.Lip Extensions: Non-tapered lip for 83 inches (2104 mm) wide models.
- 14.Included Optional Features and Accessories:
- a.Side weather seals, rubber style.
 - b.Side weather seals, nylon brush style.
 - c.Side weather seals, safety brush, yellow, black zebra striped.
 - d.Side weather seals, Vinyl Foam Weather Seal
 - e.Rear weather seals, rubber style.
 - f.Rear weather seals, nylon brush style.
 - g.Foam insulation underside of deck.
 - h.Pour-in Pan: Dock leveler welded to a steel pan, allowing it to be poured in place after concrete slab is poured.
 - i.Closed pit frame.
 - j.Dock lip safety barrier: 5 inch (127 mm) steel barrier extending above deck surface when dock is not in use, preventing warehouse traffic from rolling off edge of dock.
 - k.Vehicle Restraints.
 - l.Blue Genius advanced communication package. Includes LED interior red/yellow/green and exterior red/green traffic lights and driver warning signs with security features; activate / deactivate via code.

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