

Advance Lifts Dock Lift Specification 11 13 00

Section 11 13 00 Stationary Dock Lift

Part 1 – GENERAL

1.1 Summary

- A. Related Documents: Provisions established within General and Supplementary Conditions of the Contract, Division 1 – General Requirements and Drawings are collectively applicable to this Section.
- B. Related Sections:
 - 1. Cast In Place Concrete: [Concrete Pit]
 - 2. Metal Fabrications: [Perimeter guard rails and inserts.] [Dock slab and door protection angles.]
 - 3. Electrical: [Connections to dock equipment.]

1.2 System Description

- A. This section describes the requirements for providing a dock scissor lift as shown on the Drawing and specified as model _____.
- B. Concrete work for dock lift(s) as specified in Part 3
- C. Compliance with ANSI MHI (Material Handling Institute) 29.1

1.3 Submittals

- A. General: Submit in accordance with section 01 33 00.
- B. Product data: Submit product data for the dock equipment.
- C. Shop Drawings: Submit drawings indicating fabrication and erection of dock equipment including plans, elevations and large scale details.
- D. Maintenance Data: Submit manufacturer's maintenance and service data, including address and telephone number of nearest authorized service representative.
- E. Operating Manuals: Furnish operating and maintenance manuals and advise Owner on use and maintenance of equipment.

1.4 Quality Assurance

- A. Dock lift Standard: Comply with applicable requirements of ANSI, MH29.1, ("Safety Standard for Industrial Scissor Lifts") for construction and operation of dock lifts
- B. Electrical: All electrical components and the entire controller assembly shall be Underwriters Laboratory listed.
- C. Structural Rigidity: The scissor leg assembly shall be of structural tube construction for maximum rigidity.

1.5 Warranty

- A. Manufacturer's standard form in which the manufacturer agrees to repair or replace lift components that fail in materials or workmanship within specified warranty period.
- B. Warranty for the Structural Assembly: 10 years from date of shipment from the manufacturer.
- C. Warranty for the Hydraulic Assembly: 2 years from the date of shipment from the manufacturer.

Part 2 – PRODUCTS

2.1 Acceptable manufacturers

- A. Manufactures: Subject to compliance with requirements, provide products by one of the following:

1. Dock Lifts (scissor lifts):

a. Advance Lifts, Inc. 701 S. Kirk Rd. St. Charles, IL 60174, email sales@advancelifts.com, voice 1 800 (The dock) 843 3625.

2.2 Dock Lifts (Scissor Lifts)

A. General: Provide manufacturer's standard hydraulic dock lift of capacity, size and construction indicated, consisting of a safety tread steel platform with bevel toe guards on all four sides (or 3" vertical toe clearance between platform and the floor on top of ground units), steel tube scissor legs, lifetime lubricated bearings and a hydraulic operating system with controls, safety devices and accessories required.

B. Type: Provide stationary single scissor type hydraulic dock lift for permanent, recessed installation in a preformed concrete pit at location indicated (or permanent top of ground installation on a concrete pad at location indicated).

C. Rated Capacity: Provide lifting capacity of not less than _____ lb. with _____ lb axle load at the ends and _____ lb. axle load at the sides.

D. Vertical Travel: Provide maximum vertical travel of 58 inches.

E. Travel Speed: Provide a nominal raising speed of _____ fpm.

F. Construction: Fabricate lift from structural steel shapes rigidly welded and reinforced for maximum strength, safety and stability. Design assembly to withstand deformation during both operating and stored phases of service. Provide mounting brackets for ease of installation.

1. Platform: Fabricate platform from heavy steel plate with beveled steel toe guards on all four sides to comply with MH29.1 (or 3" vertical toe clearance between platform and the floor on top of ground units to comply with MH29.1). Provide matching hinged throw-over bridges with retention chains and snaps where indicated and removable handrails with safety chains.

a. Platform Surface: Nonskid, safety tread deck plate

b. Platform Size: _____ inches wide by _____ inches long

2. Hinged Bridge: Provide hinged throw over bridge, heavy duty piano type hinge welded to toe guard at the end of platform, complete with lifting/ retaining chain with snap.

a. Bridge material: Nonskid, safety tread plate.

b. Bridge size: _____ inches wide by _____ inches long

3. Scissor Mechanism: Fabricate leg members from heavy duty formed steel tubes to provide maximum strength and rigidity.

4. Cylinders: Equip lift with no less than two heavy duty machine grade cylinders with mechanical internal stops and return lines from breather vents to the reservoir. Cylinder rods shall be chrome plated and polished. The cylinders shall be equipped with flow controls to prevent free fall in compliance with MH29.1.

5. Bearings: Equip lift with lifetime lubricated bearings for minimum maintenance.

6. Hydraulic Power Unit: Manufacturer's standard self contained remotely located assembly consisting of a steel reservoir, UL listed motor, high pressure gear pump and valve manifold with pressure compensated flow control, down solenoid, check valve and relief valve.

7. Electrical Controls: Constant pressure UP and Down pushbutton. NEMA 12 UL listed control box with magnetic motor starter with 3 pole adjustable overloads, 24 Volt 4 amp fused secondary control transformer and the entire control box assembly, not just components, shall be labeled as UL listed.

8. Safety Devices: Provide Manufacturer's standard safety devices as follows:

a. Removable handrails constructed 42" high with midrail and 4" kick plate.

b. Manufacturer's standard safety maintenance support in compliance with MH29.1.

c. Pit mounted units shall be equipped with 8" bevel toe guards and have a minimum 2" black and yellow marking along the lower edge of the toe guards.

d. Top of ground units shall have a minimum of 3" vertical toe clearance between the platform and the floor when fully lowered.

9. Paint Finish: Manufacturer shall fully prime the entire unit, apply enamel paint and bake cure the final finish.

Part 3 – EXECUTION

3.1 Dock Lift Installation

- A. Coordinate forming recessed pit for dock lift to ensure that all dimensions conform to the requirements for the specified size and model dock lift.
- B. Attach the dock lift securely, according to manufacturer's written instructions.

3.2 Adjust And Clean

- A. Make all necessary adjustments for safe, efficient operation of the dock lift.
- B. After installation, restore all marred or abraded surfaces to original condition.