

SECTION 14600
HOISTS AND TROLLEYS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Scope: Provide one hand chain hoist with beam trolley
- B. Additional Requirements Specified Elsewhere
 - 1. Section 01340: Shop Drawings, Product Data and Samples
 - 2. Section 01400: Quality Control
 - 3. Section 01600: Materials and Equipment
- C. Related Requirements Specified Elsewhere
 - 1. Division 5: Metals
 - 2. Division 11: Equipment

1.2 QUALITY ASSURANCE

- A. Reference Standards
 - 1. Occupational Safety and Health Standards of the U.S. Department of Labor: Subpart N, Materials Handling and Storage
 - 2. ANSI B30, "Safety Standards for Cranes, Derricks, Hoists, Hooks, Jacks and Slings"
- B. Suppliers' Qualifications
 - 1. All equipment supplied by a single manufacturer or supplier
 - 2. Experienced in manufacture of this equipment
 - 3. Design Basis (Hoists)
 - a. Dresser Crane, Hoist and Tower Division of Dresser Industries, Inc.
 - b. Hoist and Crane Division of Robbins and Meyers, Inc.
 - c. Hoisting Equipment Division of Eaton Corporation
 - d. CM Hoist Division of Columbus McKinnon Corporation
 - e. Dayton
 - f. Equivalent products of other manufacturers may be accepted subject to compliance with design, function, materials and performance of the specified items
- C. Manufacturer's Instructions
 - 1. Fabricate, assemble, erect and place equipment in proper operating condition in accordance with Drawings, Specifications, engineering data, instructions and recommendations of the equipment manufacturer unless exceptions are noted by Engineer

1.3 SUBMITTALS

- A. In Accordance with Section 01340
- B. Manufacturer's Literature and Illustrations
- C. Manufacturer's Specifications and Illustrations
 - 1. Sufficient data to verify compliance with specifications and to illustrate construction or assembly of the products
 - 2. Materials
 - 3. Parts
 - 4. Device
 - 5. Accessories
 - 6. Dimensions
 - 7. Weights
 - 8. Data on shop painting
- D. Shop Drawings
 - 1. Fabrications
 - 2. Assembly
 - 3. Installation

1.4 JOB CONDITIONS

- A. Materials and coatings to resist the corrosive attack of
 - 1. High humidity conditions
 - 2. Contractor to confirm final installed conditions and dimensions of lift site(s) BEFORE pump suction vessel installation and before purchasing trolley and hoist
 - 3. Confirm capability to hoist motor from pump head assembly
 - 4. Confirm capability to hoist pump head and pump assembly (bowls and column pipe) from suction vessel
 - 5. If conflicts are discovered, adjustment in pump installation and/or hoisting equipment may be required

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN REQUIREMENTS

- A. Hoist
 - 1. Type: Hand
 - 2. Number required: One (1)
 - 3. Lifting capacity: 2,000 pounds
 - 4. Distance between bottom of lifting eye and lowest hook position: 10 feet
 - 5. Minimum distance between hooks: Not greater than 13-inches
 - 6. Maximum pull to lift full load: 75 lbs.
 - 7. Design Basis: CM Series 622 manual hand chain hoist

B. Beam Trolley

1. Type: Manual
2. Number required: One (1)
3. Capacity: 2,000 lbs.
4. Beam: W10x30; 6-inch wide flange
 - a. Confirm compatibility of beam and trolley
5. Design basis: Dayton Model 3MB58 or equivalent

2.2 MATERIALS AND FABRICATION

A. Hoists

1. Hand hoist
2. High speed, spur geared
3. Corrosion resistant aluminum alloy frame
4. Load chain equipped
5. Low headroom
6. Automatic overload protection
 - a. Stops the lift when excessively overloaded
7. Fully enclosed brake requiring no lubrication
 - a. Temperature extremes or frequent stops will not affect its positive load control
8. Latch type swivel hooks

B. Beam Trolley

1. Designed to handle heavy duty applications
2. Refer to manufacturer's standard materials and construction
3. Rollers disassembled and bolted in place on bottom flange of trolley beam

PART 3 - EXECUTION

3.1 INSTALLATION

A. General

1. Install equipment and accessories as indicated on the Drawings and specified herein
2. Orientation of hoists as directed by Engineer

3.2 FIELD QUALITY CONTROL

- A. Subject equipment to such operating tests as may be required by the Owner to demonstrate satisfactory functional and operating efficiency

END OF SECTION