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DIVISION 14

Section Title

14620 Trolley Hoists

14651Davit Crane

1. GENERAL

1.1 Work Included

- .1 Supply and installation of trolley hoist and appurtenances required for a fully operational trolley hoist.
- .2 Supply and install of steel girder and appurtenances required for a fully operational trolley hoist.
- .3 Testing and start-up reports.

1.2 Qualification

- .1 Installation is to be done by an established firm having at least five years of proven, satisfactory experience in this trade and employing skilled personnel. The firm is to be authorized by the equipment manufacturer to install the equipment specified.
- .2 Submit proof of qualifications and certification in writing to the Contract Administrator four weeks prior to commencement of Work.

1.3 Shop Drawings

- .1 Submit Shop Drawings in accordance with Section 01300.
- .2 Indicate size and description of components, materials, attachment devices, finish and construction details and safe loading.
- .3 Shop Drawings and design briefs shall be signed and sealed by a Professional Engineer registered in the Province of Manitoba.

1.4 Maintenance Data

.1 Provide maintenance data for hardware complete with pertinent details, spare parts lists, and warnings against harmful maintenance materials and practices for incorporation into maintenance manual.

1.5 Warranty

.1 Contractor hereby warrants that the monorail and hoist system will remain operative in accordance with General Conditions, but for five years.

TROLLEY HOISTS

2. **PRODUCTS**

2.1 Trolley Hoist

- .1 Trolley Hoist Description:
 - .1 Model: Columbus McKinnon (CM) Series 635 Low Headroom Trolley, model RRT2, one required.
 - .2 Safe Working Load: 2,722 kg (3 Ton)
 - .3 Reeving: 3/1
 - .4 Hook path in metres: 5.0
 - .5 Lifting Speed in metres/minute: 1.06/3.35, (3.5/11 F.P.M)
 - .6 Metal chain container for chain collection.
 - .7 Operating Voltage and frequency: 600V AC/ 3 phase, 60 Hz.
 - .8 Electrical Classification of Room: Unclassified Space.
 - .9 Controls: Demag DRC-10 Radio Control, for operator multilevel applications.
 - .10 Manufactures identification sticker to indicated rated hoist capacity.

3. EXECUTION

3.1 Examination

- .1 Before starting erection, take field measurements and examine other Work may affect this Work.
- .2 Notify the Contract Administrator of any conditions which would prejudice proper installation of this Work.
- .3 Commencement of this Work implies acceptance of existing conditions.
- .4 Store trolley hoist equipment as required by the manufacturer.

3.2 Damaged Members

- .1 Repair or replace members damaged during transit or erection, before securing in position.
- .2 Upon completion, touch up and restore to new condition, damaged or defaced factory finished surfaces.

TROLLEY HOISTS

- .3 Touch up shop primer bolts, welds, and burned or scratched surfaces at completion of installation.
- .4 Remove protective coverings and clean exposed surfaces after completion. Leave equipment and appurtenances in a first class condition.

3.3 Erection

- .1 Install trolley hoist equipment in accordance with manufacturer's instructions.
- .2 Install and hook up all equipment remote control, relays, and other electrical equipment required for operation.
- .3 Adjust crane operating components to ensure smooth operation.
- .4 Coordinate and cooperate with the structural steel and precast hollow core supplier and erector to ensure that the hoist supporting steel and hollow core are erected to the required tolerances.

END OF SECTION

DAVIT CRANE

1. GENERAL

1.1 Work Included

.1 The Section specifies the supply and installation of one portable davit crane and a quantity of pedestal mounts sufficient to service all submersible mixers, mixed liquor recycle pumps, and sampling pump.

1.2 Submittals

- .1 Shop Drawings: submit in accordance with Sections 01300 and 11005.
- .2 Operating and Maintenance Data: provide for incorporation in O&M Manual as specified in Section 01300. Include complete description of operation together with general arrangement and detailed drawings, wiring diagrams for power and control schematics, parts catalogues with complete list of repair and replacement parts with section drawings, illustrating the connections and the part manufacturer's identifying numbers.

1.3 Shipment, Protection, and Storage

- .1 Ship the equipment pre-assembled to the degree possible; identify any site assembly requirements.
- .2 Identify special storage requirements. Store on-site until ready for incorporation in the Work using methods recommended by the manufacturer to prevent damage, undue stress or weathering.

2. **PRODUCTS**

2.1 Description

- .1 Provide:
 - .1 One (1) Thern Model 5110E2SS stainless steel portable davit crane rated for 454 kg (1000 lb) with 115/1/60 VAC electric winch.
 - .2 Eleven (11) Thern Model 510SS upright mount pedestal bases.
 - .3 Eleven (11) Thern Model TK3P plastic base covers.
 - .4 One (1) Thern Model WS25-60NE wire rope assembly using 6 mm (0.25 inch) diameter wire rope of 18 m (60 ft) length.
 - .5 One (1) Thern Model RW50 stainless steel cable spool.
 - .6 One (1) Thern Model B1766 wire rope keeper.

DAVIT CRANE

2.2 Acceptable Manufacturers

.1 Thern

2.3 Spare Parts

.1 Provide a list of spare parts which might be required during the initial five years of operation. Provide prices for each part.

3. EXECUTION

3.1 Manufacturer's Representative

.1 The manufacturer's representative shall be required to attend the Site to train installation personnel, train operating and maintenance staff, to witness installation and testing to ensure the equipment is installed and operated as intended.

3.2 Installation

- .1 Verify satisfactory delivery of the equipment by completing Form 100, included in Section 01650.
- .2 Cooperate with the Contractor to fulfill the requirements for a successful installation as documented by Form 102, included in Section 01650.
- .3 Conform to the requirements of Section 01664.

3.3 Training

.1 Conform to the requirements of Section 01664.

END OF SECTION