

**Part 1            General**

**1.1            RELATED SECTIONS**

- .1      Section 01 61 00 - Common Product Requirements
- .2      Section 01 78 00 - Closeout Submittals

**1.2            REFERENCES**

- .1      Canadian Standards Association (CSA International)
  - .1      CSA C22.2 No. 100-04, Motors and Generators.
  - .2      CSA C22.2 No. 145-M1986(R2004), Motors and Generators for Use in Hazardous Locations.
  - .3      CAN/CSA G40.20/G40.21-98, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
  - .4      CAN/CSA-G164-M92(R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.
  - .5      CAN/CSA-S16-01, Limit States Design of Steel Structures.
  - .6      CAN/CSA-S136-94(R2001), Cold Formed Steel Structural Members.
  - .7      CSA-S136.1-95(R2001), Commentary on CSA Standard S136.
  - .8      CSA W47.1-92(R2001), Certification of Companies for Fusion Welding of Steel Structures.
  - .9      CSA W48-01, Filler Metals and Allied Materials for Metal Arc Welding.
  - .10     CSA W55.3-1965(R1998), Resistance Welding Qualification Code for Fabricators of Structural Members Used in Buildings.
  - .11     CSA W59-M1989(R2001), Welded Steel Construction (Metal Arc Welding) Metric.

**1.3            SUBMITTALS**

- .1      Submittals: in accordance with Section 01 33 00 - Submittal Procedures.
- .2      Product Data: submit WHMIS MSDS - Material Safety Data Sheets and include: product characteristics, performance criteria, physical size, horsepower, watt rating, limitations and finish.
- .3      Shop drawings:
  - .1      Submit drawings stamped and signed by professional engineer registered or licensed in the Province of Newfoundland and Labrador, Canada.
  - .2      Indicate:
    - .1      Overall dimensions.
    - .2      Fixing support dimensions.
    - .3      Arrangement and dimensions of accessories.
    - .4      Diagram of connections.

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- .5 Rating.
    - .6 Weight.
    - .7 Installation data.
  - .4 Closeout Submittals:
    - .1 Provide maintenance data for jib crane and all components for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.
    - .2 Data necessary for maintenance of jib crane and all components.
    - .3 Manufacturer's recommended list of spare parts.
  - .5 Quality Assurance:
    - .1 Submit site tests results of installed jib crane and components.
  - 1.4 DELIVERY, STORAGE AND HANDLING**
    - .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
    - .2 Deliver, store and handle materials in accordance with manufacturer's written instructions.
    - .3 Handle jib crane and all components with suitable lifting equipment.
    - .4 Store all equipment in heated, dry, weather-protected enclosure.
  - 1.5 EXTRA MATERIALS**
    - .1 Provide maintenance materials and spare parts in accordance with Section 01 78 00 - Closeout Submittals.
  - Part 2 Products**
  - 2.1 MATERIALS**
    - .1 Jib:
      - .1 Structural steel: to CAN/CSA-G40.20/G40.21 and/or CAN/CSA-S136.
      - .2 Anchor bolts: to CAN/CSA-G40.20/G40.21, Grade 300W ASTM A36/A36M.
      - .3 High strength anchor bolts: to ASTM A193/A 93M.
      - .4 Bolts, nuts and washers: to ASTM A325.
      - .5 Welding materials: to CSA W48 Series CSA W59 and certified by Canadian Welding Bureau.
      - .6 Hot dip galvanizing: galvanize steel to CAN/CSA-G164, minimum zinc coating of 600 g/m<sup>2</sup>.
      - .7 Boom to have inorganic zinc coating only.
    - .2 Hoist and Trolley:
      - .1 CSA Approved
    - .3 Motor:

- .1 Non-hazardous to CSA C22.2 No. 100 and EEMAC M1-7
    - .2 Hazardous locations to CSA C22.2 No. 145
  - .4 Chain:
    - .1 Chain: Nickel plated
- 2.2 CORROSION PREVENTION AND FINISH PAINTING**
  - .1 Provide equipment with coating systems suitable for marine environment.
- 2.3 RATING**
  - .1 Jib:
    - .1 Capacity: 2 Ton
  - .2 Hoist and Trolley:
    - .1 Capacity: 2 Ton
- 2.4 TROLLEY AND HOIST ENCLOSURE**
  - .1 Totally enclosed non-ventilated.
- 2.5 SERVICE CONDITIONS**
  - .1 Ocean environment.
- 2.6 APPLICATION**
  - .1 Hoist and trolley suitable for lifting boat onto dock.
- 2.7 PERFORMANCE CHARACTERISTICS**
  - .1 Jib:
    - .1 Span: 17 ft
    - .2 Height under boom: 20 ft
    - .3 Mast diameter: 20 in. Maximum
    - .4 Jib to have 180 degree power rotate with option for manual operation.
    - .5 Jib power: 240 V, 1 phase, 60 Hz.
    - .6 Base plate to fit within a square of 56 in. side dimension.
    - .7 Jib to be stand-alone unit with no guy wires.
  - .2 Trolley and hoist:
    - .1 Hoist speed: 8 fpm
    - .2 Trolley speed: 30 fpm
    - .3 Hoist power: 240 V, 1 phase, 60 Hz
    - .4 Trolley power: 240 V, 1 phase, 60 Hz
    - .5 Lift: 40 ft
    - .6 Time rating: continuous

.3 Service factor: 1.

## **2.8 DUTY CYCLE**

.1 Continuous

## **2.9 BEARINGS**

.1 Antifriction type bearings, fitted with readily accessible facilities for lubrication while motor running or stationary.

## **2.10 ACCESSORIES**

.1 End stops and Rotation stops

.2 Cast in place anchors and base template

.3 Grease nipples

.4 Pendant: 40 ft long.

.5 Remote:

.1 Up/ down

.2 North/ east

.3 2 transmitters

.4 1 receiver

.5 Required batteries

.6 Chain container

.7 Accessories: suitable for use in same hazardous location as that specified for jib.

## **Part 3 Execution**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

.1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

**END OF SECTION**