

**1.0 Scope**

- 1.1 To define the requirements for the CF4 hand chain manually operated chain hoists.

**2.0 Codes and Standards**

- 2.1 ASME B30.16 "Overhead Hoists (Underhung)"
- 2.2 ASME HST-2M "Performance Standard for Hand Chain Manually Operated Chain Hoists"
- 2.3 JIS B 8802 "Manually Operated Chain Hoists"

**3.0 Design**

- 3.1 The hand chain manually operated chain hoists shall be model CF4 as supplied by Harrington Hoists, Inc. The hoists shall be rated ½ US Ton through 5 US Ton.
- 3.2 The hand chain manually operated chain hoists shall meet the design and construction criteria of paragraph 2.1 above.
- 3.3 The hand chain manually operated chain hoists shall employ single gear reduction spur gear transmission.
- 3.4 The hand chain manually operated chain hoists shall be equipped with a dry Weston type mechanical load brake that incorporates a ratchet pawl, four braking surfaces, and non-asbestos brake pads that resist humidity and moisture. The brake shall be totally enclosed for protection from impact, dirt, and moisture.
- 3.5 The hand chain manually operated chain hoists shall be equipped with Grade 100 load chain.
- 3.6 The hand chain manually operated chain hoists shall be equipped with hooks that are drop forged from carbon steel, and which are designed for ductile mode failure upon overload. The hooks shall have measurement nubs to facilitate inspection measurements. The hooks shall be equipped with spring loaded latch type throat closures. The bottom hook shall be designed for 360 degree swivel.
- 3.7 The hand chain manually operated chain hoists shall have a single fall of load chain for capacities 1.5 US Tons and below.
- 3.8 The hand chain manually operated chain hoists shall be equipped with a contoured chain guide that is tucked into the hoist body where it is out of the way and free from potential interference.
- 3.9 The hand chain manually operated chain hoists shall have a load sheave equipped with a stripping device that keeps the load sheave free of debris.
- 3.10 The hand chain manually operated chain hoists shall have a hoist body featuring a die-cast aluminum body.
- 3.11 The hand chain manually operated chain hoists shall be equipped with high-strength, heat-treated main pinion shaft and load gear.



**SPECIFICATION**  
**MANUALLY OPERATED CHAIN HOIST**  
**MODEL CF4**

- 3.12 The hand chain manually operated chain hoists shall be equipped with pre-lubricated ball bearings and precision machined drive train components.

**4.0 Documentation**

- 4.1 Each hand chain manually operated chain hoist shall be supplied with an Owner's Manual that includes the following information.
- a) Important Information and Warnings
  - b) Installation and Operation
  - c) Inspection
  - d) Lubrication, Maintenance and Handling, and Troubleshooting.
- 4.2 Each hand chain manually operated chain hoist shall be supplied with a Parts List.
- 4.3 Each manually operated chain hoist shall be supplied with a "Certificate of Inspection and Test" attesting that the hoist was thoroughly inspected and subjected to a 125% load test in accordance with the latest version of ASME B30.16.