

Hoist Use and Safe Operation

1.0 Purpose and Scope

Many types of hoists and rigging are used at Waupaca Foundry for lifting and moving materials. This policy ensures that only trained and qualified employees will operate this equipment.

2.0 Forms

Reserved

3.0 Definitions

Moused: Securing a wire, strap, rope or cord to close the throat opening of a hook to prevent the sling or shackle from becoming detached.

4.0 Inspection

- 4.1 All hoists must be inspected daily before use for evidence of wear, malfunction, or damage. This does not have to be documented, but at a minimum must include inspection of all operating mechanism, air and hydraulic line leakage, the hooks for cracks or deformation and the hoist chains, wire ropes and cables for any apparent damage.
- 4.2 In addition, all hoists must be inspected quarterly, with documentation. This quarterly inspection must include all parts of the daily inspection, and documented checks of the complete inspection of the bolts, rivets, sheaves, gears, pins, shafts, sprockets, electrical parts, safety cables, load bearing parts (ie: trolley) and load brakes. Quarterly inspections must be maintained for at least 3 years.
- 4.3 All new hoists must have a documented inspection prior to being put into service.
- 4.4 Chain sling inspection: Each lifting chain sling must be identified with a permanently affixed and durable tag that states size, grade, rated capacity and reach.
Inspections of the chain sling must be made at least annually, and more frequently in harsh environments.
Inspection for wear, defective welds, deformation and increase in length shall be made by a competent person.
- 4.5 Hoist and rigging equipment that is found to not be working properly should be removed from service immediately.

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5.0 Safe Operation

- 5.1 The safe operating load capacity of each hoist shall be shown on the hoist body.
- 5.2 Loads shall be picked up only when they are directly under the hoist. If the load is not properly centered it places stress on the hoist and may swing causing injury or damage.
- 5.3 Loads shall not be placed over people and should not be used to lift, support or transport people.
- 5.4 Do Not use the upper limit switch to "stop" the hoist. It is to be used for emergency stops only.
- 5.5 Do Not leave a load on a hoist unattended.
- 5.6 Do test the hoist brakes when approaching the rated load capacity.
- 5.7 All hoists should be securely attached to their supports (fixed or trolley) and the capacity rating of the support visible to the operator.
- 5.8 Hoists may be rigidly suspended or hook suspended. If the hoist is hook suspended, the support hooks shall be moused or have a hook latch. Latches are also recommended for the load hooks.
- 5.9 Overhead hoists operating on rails, tracks, or trolleys shall have positive stops or limiting devices on the equipment, rails, tracks or trolleys to prevent over-run of the safe limits. Hoist/cranes with power driven horizontal movement must have bolted end stops (bumpers) that are either welded, or equipped with safety cables to prevent the end stop from falling if the bolts are sheared during impact. The bumper shall be mounted so there is not a direct shear on the bolts.
- 5.10 Hoisting that is required near energized power sources, such as the Hot Metal Carrier track (480v), requires additional precautions. The minimum distance from the hoist, hoisting cable and the load being lifted to the Hot Metal Carrier track must be 10 feet. If hoisting must be performed closer than 10 feet, the Hot Metal Carrier track must be de energized and locked out before work can begin.

6.0 Responsibilities

- 6.1 Supervisors are responsible for ensuring employees under their supervision are trained to operate hoists. They are also responsible for ensuring the hoist and rigging equipment is inspected by the operators.
- 6.2 Maintenance personnel are responsible for inspecting and repairing the hoist and rigging equipment. Maintenance also maintains documentation of pre-service and in-service hoist inspections.

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- 6.3 Safety Department is responsible for arranging training for the hoist operators and inspectors. Safety is also responsible for periodically verifying monthly test and inspection records.

7.0 Training

Training must be conducted annually for all hoist users. This may be accomplished with a safety talk, and a documented observation of the hoist user operating the hoist.