Hot Metal Handling hoists are held to different specifications than any standard duty hoist. If your crane is carrying hot or molten metal, it may be subject to additional safety standards per OSHA and ASTM.

**REQUIRED FEATURES:**

- **Power Circuit Upper Limit Switch** that cuts the power to the entire hoist, opening up a disconnect switch. Most standard limit switches only cut power to the control circuit on the hoist.

- **8:1 Safety Factor** on the hoist wire ropes. Standard safety factor is 5:1. Hot Metal Handlers require a greater safety factor due to the “loss of strength” from the heat.

- **Secondary Holding Brake** on the hoist load is required. Hoists typically come standard with one holding brake and oftentimes a control braking means. The secondary holding brake is a fail-safe measure that maintains the load if the first holding brake fails.

- **Trolley Safety Lugs** are required to minimize the drop and hold the trolley in event of axle or wheel failure. Standard cranes only require safety lugs on the end trucks.

- **External Locking Device** on load-supporting bolts are required, such as cotter pins. Standard applications use lock washers and/or lock nuts.

- **(3) Wraps of Rope** are to remain on the rope drum when the hook has reached its lower limit. Standard hoists require only two wraps of rope.

- **Warning Device** such as bells, horns, sirens, or flashing lights are required to be activated when the crane is in motion. Any one or combination of these devices satisfy the requirements.

Note that Chain Hoists designed for Hot Metal Handling applications are left to the interpretation of these standards by the manufacturer. In our experience, it is typically not recommended to use Chain Hoists in a Hot Metal Handling application due to the exposure of the chain to high temperatures. The high temperatures can “re-temper” the steel load chain causing failure. In Wire Rope applications deformation in the rope occurs before failure, allowing preventative safety measures to be taken.

Please don’t hesitate to give us a call or email us. We are happy to answer any of your questions or concerns regarding your hot metal carrying operations.