



ISRI[™]

SAFETY GUIDANCE MATERIAL

SAFETY OPERATIONS GUIDANCE

This safety resource was written for the scrap industry by the scrap industry and was developed to assist you in making your scrap operation a safe place for employees, customers, and visitors. This resource covers OSHA requirements that may or may not be applicable to your operation.

CAST DROP BREAKING

DEFINITION: Process in which a steel ball is dropped on castings from a suspended magnet

Potential Hazards:

- Aerosolized particles
- Falling metal pieces
- Falling steel ball
- High-velocity metal fragments
- Noise
- Motor oil or hydraulic fluid
- Sharp objects, edges
- Swinging/suspended material

Guarding/Shielding:

- Cast breaking areas must be shielded sufficiently to stop high-velocity flying metal fragments, or positioned in such a way that fragmentation cannot pose a hazard to people or property.
- The crane operator's cab must be shielded in such a way as to prevent high-velocity flying fragments from posing a hazard.

Protective Equipment:

Hard hats*

Safety glasses*

Steel toe/steel shank work boots*

Gloves as needed

Respirator as needed

**minimum requirements*

Safety Procedures:

- Operators and managers must familiarize themselves with OSHA's minimum fall protection requirements. Where walking or working surfaces are elevated four feet or higher from adjacent surfaces, standard railings or personal fall protection devices must be utilized.
- Designate an area where workers may stand safely while cast breaking operations are being performed, and forbid all access to all personnel to non-safe areas.
- When workers are in the danger zone (as defined by areas other than the safe area), the drop ball must remain in direct contact with the ground.
- Operators of the machinery and of material handling equipment (cranes, material handlers, skid steers, loaders, etc.) or the device handling the drop ball must maintain positive contact with each other at all times, either visually, or by radio or other audible device.

