



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.

Wire Chopper

DEFINITION: Box-shaped machine that cuts insulated wire and cable by means of a series of rotary-mounted knives that separate metallic from nonmetallic granulate.

Potential Hazards:

- Electric shock
- Moving hydraulic parts
- Noise
- Pinch points
- Slippery walking/working surfaces
- Flying metal fragments
- Dust

Guarding/Shielding:

- Point-of-operation guards must prevent a worker from placing any body part into the machine's danger zone during the operation cycle. Danger zone includes pinch points, rotating parts, and flying material.
- Access/loading doors must be equipped with interlock or similar mechanism that shuts operation down when door is opened.
- Shields of construction sufficient to stop flying metal fragments should be positioned to protect employees working nearby.
- Controls should be guarded to protect from flying material and damage by workers or mobile equipment.
- Power transmission parts including gears, shafts, and conveyor drive pulleys should be adequately guarded.

Protective Equipment:

Hard hats*
Safety glasses*
Steel toe/steel shank work boots*
Face shield as needed
Gloves as needed
Respirator as needed
**minimum requirements*



Safety Procedures:

- Lockout/Tagout procedures must be developed, followed, and enforced for equipment maintenance/servicing.
- No smoking. No open flames.
- Determine, through air monitoring, whether use of respirators is required.
- Practice good housekeeping around chopper to prevent slips/falls. Even dry pieces of residue can lead to slips and falls.
- Maintain proper number and location of emergency stops.
- Eye wash station must be near area where oil/fluid splashes could occur.
- Fire extinguishers should be appropriately placed, well labeled, with unobstructed access.
- Post emergency shut-down procedures.
- Chopper frame must be grounded to minimize spark ignition hazard.
- If overhead conveyors are used, prevent pedestrian traffic under conveyor during operation.
- An eye wash station should be situated near chopper.
- There should be audible/visible signs for start-up of equipment with signs describing the start-up alarm.
- Warning signs should indicate hazardous operation area with restrictive access.