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.

METAL DRYER

DEFINITION: Rotary or box-type machine used to heat metal scrap (such as turnings) to remove moisture and oil (such as cutting fluid) contamination.

Potential Hazards:

- Aerosolized particles
- Burns/Heat
- Electric shock
- Explosive atmosphere
- Fire
- Flammable gas/vapor/liquids
- Hazardous fumes
- Moving hydraulic parts
- Noise
- Pinch points
- Slippery walking/working surfaces

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, flying material, and hot surfaces.

- Access/loading doors must be equipped with interlock or similar mechanism that shuts operation down when door is opened.

Protective Equipment:

Hard hats*
Safety glasses*
Steel toe/steel shank work boots*
Gloves as needed
Respirator as needed
Fire resistant clothing
Oil resistant boots, gloves
**minimum requirements*

Safety Procedures:

- Lockout/Tagout procedures must be developed, followed, and enforced for equipment maintenance/servicing.

- Designate a safe zone around dryer to prevent burns to pedestrians.

- No smoking. No open flames.
- Keep flammables combustibles away.
- If indoors, dryer should have forced air ventilation to outside or to baghouse or other emission control device. Exhaust ducts should not discharge near doors, windows, or other air intakes.
- Determine, through air monitoring, whether use of respirators is required.
- Practice good housekeeping around dryer to prevent slips/falls.
- Maintain adequate drainage/collection of fluids.
- 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 near dryer, well labeled, with unobstructed access.
- Post emergency shut-down procedures.
- Regularly check for fuel gas leaks.
- Main fuel shut-off must be located away from dryer, easily accessible and labeled.
- Post type of fuel in use at building entrance.
- Regularly monitor temperature readings.
- Train workers on unacceptable materials in dryer including closed containers, magnesium, nitrates, and volatile materials.
- Dryer frame must be grounded to minimize spark ignition hazard.
- Gas-fired units must have an auto safety shut-off valve that cuts fuel glow if pilot it extinguished.
- High volume water supply and hose should be near dryer and inspected regularly.
- Stacks or ducts passing through walls must be properly insulated or clearance provided.