



ISRITM

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.

HYDRAULIC CAST BREAKER

DEFINITION: Hydraulic powered box type machine used to crack or crush castings such as motor blocks by means of a cylinder-mounted breakerhead.

Potential Hazards:

- Aerosolized particles
- Electric shock
- Fire
- Flammable gas/vapor/liquids
- Hazardous fumes
- Moving hydraulic parts
- Noise
- Pinch points
- Slippery walking/working surfaces
- Caustic washing solutions
- Swinging/suspended/falling material during loading
- Flying metal fragments

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, gates, and flying material. Access/loading doors must be equipped with interlock or similar mechanism that shuts operation down when door is opened.
- Shielding including overhead protection must be provided for ground operator.
- Mobile equipment used to load Cast Breaker should be equipped with shatter proof windshields or expanded steel in front of factory windshield.
- Controls must be positioned or guarded to prevent damage by workers or equipment.
- Power transmission parts including gears, shafts, and conveyor drives must be guard to prevent accidental entanglement.

Protective Equipment:

Hard hats*

Safety glasses*

Steel toe/steel shank work boots*

Gloves as needed

Respirator as needed

**minimum requirements*



Safety Procedures:

- Lockout/Tagout procedures must be developed, followed, and enforced for equipment maintenance/servicing.
- Designate a safe zone around Cast Breaker to prevent injury to pedestrians.
- Determine, through air monitoring, whether use of respirators is required.
- Practice good housekeeping 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.
- Dryer frame must be grounded to minimize spark ignition hazard.
- Stairs and walkways should be built from material to offer maximum protection and traction even if covered with oils.
- Precautions should be taken to prevent the tracking of oils from the Breaker area.
- Warning signs should indicate area of hazardous operations and appropriate restrictions.
- Warning signs should indicate PPE requirements prior to entrance.