



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

MAGNET

DEFINITION: An electromagnetic tool attached to a material handling crane or other lifting device to lift, move, and separate ferrous metal.

Potential Hazards:

- Gravity: falling magnet/falling material
- Electric shock/burns
- Fire
- Magnetic pull
- Cuts during wire repair
- Arc of travel—crane and boom

Guarding/Shielding:

- Leads and connectors must be present and in proper location. Replace if worn.
- Replace connecting boom lift link according to manufacturers specifications and schedule.
- Crane windshield must be adequately protected with expanded metal or impact-resistant material such as Lexan.

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 no travel zone around crane to protect pedestrians and equipment.
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- Fire extinguisher should be in cab or mounted within easy access.
- Inspect magnet daily before use. Repair/replace as needed.
- Do not use magnet to break scrap.
- Store magnets off ground to prevent moisture absorption.
- Always use a 3-point contact to dismount a crane.
- Never swing a load over a person or vehicle.
- Never turn your back on a magnet.
- Operators must be cautious of magnet swing when boomed up and swinging back toward cab, as some booms may allow magnet to travel into cab.
- If so equipped, always use outriggers when operating magnet crane.
- Operators must be cautious of tipping when overloading magnet or booming out too far.
- Remember to cut away from your body when repairing leads.