

Battery Breaking

Definition: Process by which casings of electric storage batteries are sawed or sheared open in order to remove plates, terminals and solution.

Potential Hazards:

Aerosolized particles
Corrosive liquids
Hazardous vapors
High-velocity flying parts
Flammable/explosive gas (hydrogen)
Noise
Sharp objects/edges
Slippery walking/working surfaces

Guarding/Shielding:

Power-driven saws, cleavers, or shears used to cut battery casings must be guarded at the point of operation in such a way as to avoid injury caused by contact with moving parts, and impact from flying debris.

Where splash hazards exist, shielding must be in place.

Protective Equipment:

Hard hats*
Safety *goggles**
Face Shield*
Corrosive-resistant steel-toe/steel shank work boots*
Corrosive-resistant work gloves*
Respirator with acid gas cartridge
Hearing protection
*minimal requirement

Safety Procedures:

Battery breaking operations likely will trigger a number of OSHA regulations. You should familiarize yourself with the standards for lead, arsenic, antimony, arsine, stibine, and sulfuric acid.

If located indoors, the area used for battery breaking must have forced air ventilation exhausted to a bag house or other emission control device.

Emergency showers must be readily accessible and clearly marked in areas where splashes could occur.

Sufficient safe clearances must be allowed between machinery and adjacent aisles or passageways. Permanent aisles and passageways must be clearly marked.

Motors and other electrical equipment must be grounded.

All walking/working surfaces must be kept clean and dry.

Where the vertical distance between walking or working surfaces exceeds four feet (48 inches), railings or fall protection equipment must be utilized.

Designate and enforce a safety zone, the area in which the operator of the equipment must be while the equipment is in use.

Keep suspended loads clear of walking/working areas, power lines, obstructions, buildings, and other hazardous locations.