



## Battery Charging Safety

Battery charging operations deal with some common hazards, such as burns and back injuries. There are many simple precautions that can be taken to combat these dangers.

Battery charging should be done in an area set up for this activity. Hazards common to this type of work can be isolated from other employees. Wood-slat floor boards or rubber mats should be used in the area to minimize slips and falls, or the danger of electrical shock. These boards or mats should be kept in good condition. Report any faulty or defective boards or mats.

Ample ventilation to disperse fumes, water for flushing of electrolyte spills, and water for fire protection are necessary. Fire doors should be installed between the charging area and flammable storage areas.

Only trained personnel should charge or change batteries. No smoking regulations should be observed, as escaping hydrogen can be easily ignited. Open flames must be kept out of the area.

Personal protective apparel is required. Splash-proof goggles are essential to prevent splashes from reaching your eyes. Acid-proof gloves and aprons should also be worn. Your footwear should have non-slip soles, and rubber boots should be worn during battery filling.

Back injuries are a common problem. Therefore batteries should be moved by roller conveyors or chain hoists to avoid back strains and hernias. Use hand carts to transport batteries and carboy tilters or siphons for acids. If it is necessary to lift a battery manually, safe lifting procedures should be used.

Never place metal tools or objects on top of batteries. They can cause a short circuit, explosion, or burns. Avoid wearing rings. Powered chain hoists should be equipped with a chain collecting basket. When using manual hoists, cover the battery to prevent shorts due to contact with the chain.

Know the location of the emergency eyewash or shower stations. Any injured employee should receive first aid or medical attention for acid burns. All spills should be properly cleaned up. A strong alkali like baking soda, should be applied to floor spills and cleaned up.

When changing or charging a battery, be sure the truck is correctly positioned and the brakes are set. Keep vent caps in place. Pour acid into water, not water into acid.

We've covered some of the elements of battery charging and changing safety. Report faulty electrical apparatus and follow the manufacturer's recommendations for charging rates.

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