

Eye Wash Station in 10 Seconds!

by Natalie Schoonover
CCAR Environmental/Safety Specialist

Eye injuries are one of the most common and preventable type of work-related injuries in the automotive industry. Proper eye protection can help prevent most incidents; however, even with the proper use of safety glasses, goggles and face shields, an unforeseen accident can still occur.

A technician handles several chemicals and corrosives on a daily basis. Batteries are a good example of a corrosive agent that, if exploded, could send battery acid into the technician's eyes - leaving only a matter of critical seconds to drench or flush out the eyes.

With only seconds to act, it's imperative that emergency eyewash stations are strategically positioned in a shop to meet the applicable American National Standards Institute (ANSI) standard, which generally requires that emergency equipment be positioned within 10 seconds walking time from the location of a hazard. The eyewash equipment must be installed on the same level as the hazard (i.e., getting to it should not require going up or down stairs or ramps), and the route from hazard to equipment should be, as much as possible, a straight path and free of obstructions.

OSHA Regulations and ANSI Standards

The U.S. Occupational Health and Safety Administration (OSHA) code of Federal Regulations, **29 CFR 1910.151(c)**, require that an emergency eyewash or eyewash and shower be provided whenever employees are exposed to corrosive materials. The regulation also states, "It is the employer's responsibility to assess the particular conditions related to the eyewash/shower unit, such as water temperature, to ensure that the eyewash/shower unit provides suitable protection against caustic chemicals/materials to which employees may be exposed."

The OSHA regulation does not, however, provide specific instruction regarding the installation and operation of emergency eyewash and shower equipment, because it refers to ANSI to establish the standard. The ANSI standard **ANSI Z358.1-2004** is the recognized source of guidance to comply with OSHA 1910.151(c).

To obtain a copy of this ANSI standard, contact:

American National Standards Institute, Inc. 11 West 42nd Street
New York, New York 10036 Phone - (212) 642-4900 Web Site – www.ansi.org

Eyewash Station Types

There are several types of systems to consider when purchasing an eyewash station, but the most important factor in choosing an eyewash station is its labeling: Does it certify that the eyewash station meets the **ANSI Z358.1-2004** standard? If you have any question, ask your vendor to provide verification. In the case of an existing eyewash station, you may want to check that your station meets the standard mentioned above.

The following are different types of eyewash systems:

- **Gravity Feed Self-Contained** - emergency eye wash treatment in areas inaccessible to plumbing with water stored in the unit.
- **Plumbed** - connected to a constant fresh water supply line.
- **Control Valve** - turns unit on, providing water or solution flowed water.

All three types listed must supply potable water at the flow rates and time durations specified in ANSI standard.

Factors to Remember

- All employees should be trained on where the eyewash station is located.
- Place proper signage above eyewash stations labeling it "Emergency Eye Wash."
- Walkways to the eyewash station should always be clear.
- The facility should be clearly marked and in an accessible location, no more than 10 seconds or 50 feet away from shop area.
- At least a 15-minute supply of flushing fluid must be available.
- Eyewash units must supply flushing fluid to both eyes simultaneously.
- Always check to make sure the system flushing fluid supply valve stays open without the use of the operator's hands.
- Eyewash bottles should never replace permanent emergency eyewash facilities; an injured person still needs the option to go to emergency eyewash and flush the eyes for the required 15 minutes.
- Technicians should be able to locate the eyewash station with eyes closed.
- Record maintenance on eyewash stations by using a form or tag.
- Gravity feed solution must be maintained according to the manufacturer's instructions and promptly disposed of by the expiration date.
- Water and solution should be kept within a comfortable temperature range (60° - 95°F).
- A plumbed system may be more costly initially, but the regular cost of the solution for self-contained system may outweigh the difference in price.
- Plumbed eyewash shall be activated at least monthly to flush the line and to verify proper operation.
- If using a self-contained system, you must clean out and maintain it at a minimum of once every six months.

More than 10 seconds may result in a serious eye injury – and an OSHA citation. Don't let it happen in your shop.

