

## YOUR INDUSTRY...THEIR SAFETY...



## OUR SOLUTIONS

MINING: SAFETY SYSTEMS  
THAT MAKE A DIFFERENCE

**Haws**  
*Integrated*<sup>™</sup>

ENGINEERED SOLUTIONS<sup>®</sup> FOR SAFETY

## MINING :: SAFETY SYSTEMS THAT MAKE A DIFFERENCE

With a broad range of hazardous chemicals and chemical byproducts ranging from Potassium Cyanide (KCN) to Dimethylmercury (C<sub>2</sub>H<sub>6</sub>Hg) present at many mining sites, providing effective safety and drench systems is essential.

### DRENCH FOR SAFETY

*Current emergency shower and eyewash safety code states that “where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.”*

### CHECK YOUR MSDS

*The Material Safety Data Sheet for Potassium Cyanide (KCN) states: in case of contact with skin, “Get medical aid immediately. Immediately flush skin under a drench shower for at least 15 minutes while removing contaminated clothing and shoes.”*

Safety standards further specify that emergency shower/eyewash water must be tepid – meaning it must be between 15.5°C and 37.7°C (60-100°F).

- If the water is too cold, a worker exposed to hazardous material is unlikely to stay in long enough for a medically effective decontamination or may compound their chemical exposure with severe hypothermia.
- If the water is too hot, the biological response is for pores in the skin to open, potentially causing increased contaminant absorption.
- Excessively hot water may also trigger increased chemical reaction and cause severe scalding.

### TEMPERATURE MATTERS

*ANSI Z358.1 Standard for Emergency Eyewashes and Shower Equipment defines tepid (tempered) water as “A flushing fluid temperature conducive to promoting a minimum 15-minute irrigation period. A suitable range is 15.5-37.7°C (60-100°F)”.*

Whether your site is an ore processing facility in the scorched territory of Australia's outback or a mineral processing operation in the arctic extremes of Siberia, your safety shower/eye/face wash and decontamination systems require a reliable supply of high-flow tempered water. Current ANSI standards require a minimum delivery of 23 gallons (87L) per minute for 15 sustained minutes at each combination shower/eye/face wash unit: That is a total of 345 gallons (1306L) of temperature-controlled water per unit.

### SAFETY SYSTEMS

Every mine site is subject to a unique combination of operating demands and climate conditions. These site-specific conditions translate to distinct system requirements for each site. In turn, system requirements drive early design decisions, overall complexity and project cost. HAWS INTEGRATED™ applies a unique combination of engineering expertise (hydraulic, power, thermal, and instrumentation), project management discipline, and safety response knowledge to optimize the balance of system attributes and operational functionality throughout the entire asset lifecycle.

### CONDITIONS DRIVE REQUIREMENTS

*Site-specific factors include: exposure to corrosive materials, climate extremes, seismic activity, environmental compliance, water and power infrastructure, and local systems and operational integration.*

**Our goal is to keep your safety response assets in continuous compliance so everyone returns home safe.**

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