

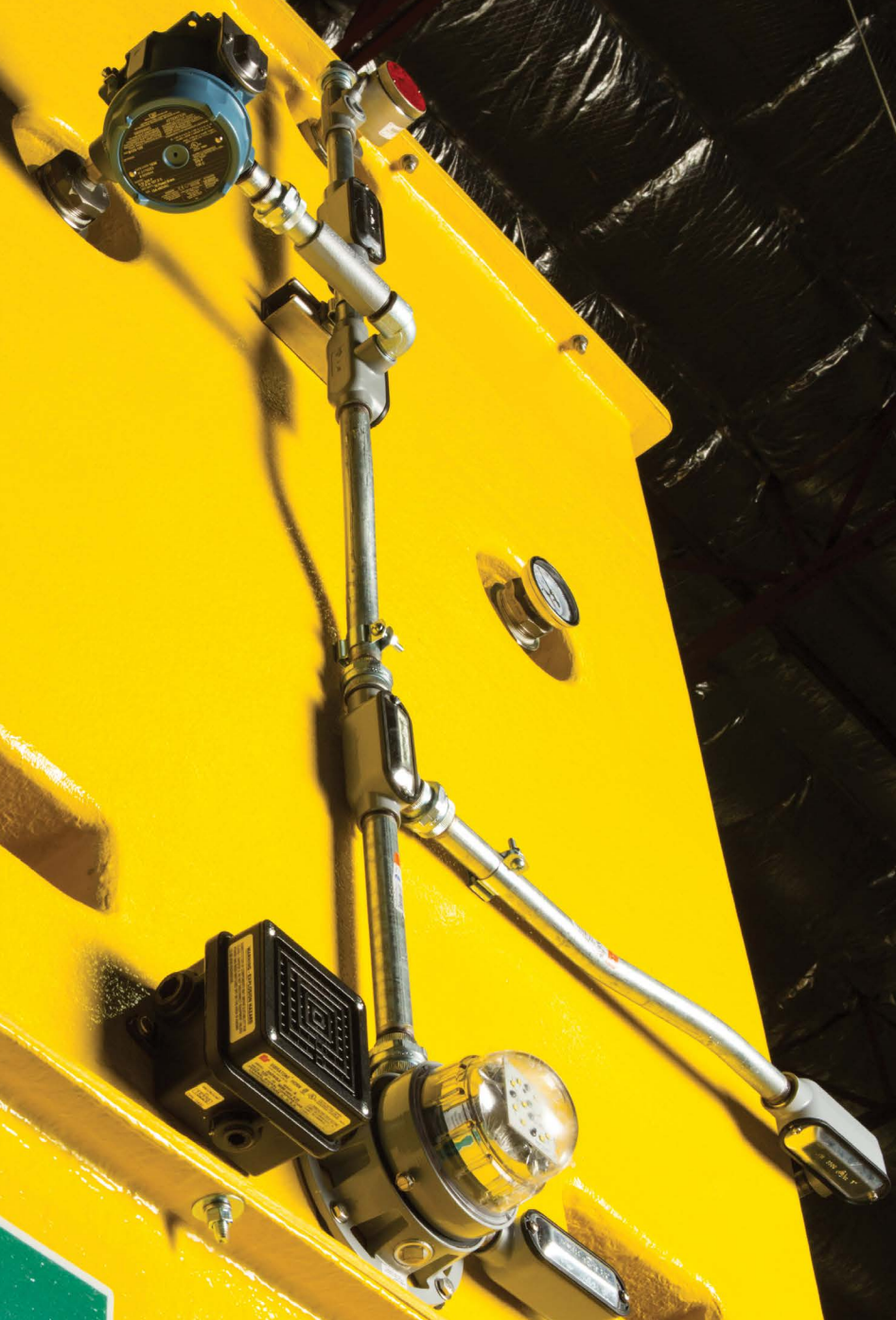


Ingenuity is the HAWS® culture. Every day we work to address your needs and solve your challenges by applying imagination and initiative to make your job easier.

HAWS
Integrated™

ENGINEERED SOLUTIONS® FOR SAFETY

 **Haws**
Integrated
ENGINEERED SOLUTIONS® FOR SAFETY



SOLUTION SPECIFIC ENGINEERING



Quality, reliability and value are driven by our knowledgeable safety thought leaders. As a best-in-class emergency response provider for more than 50 years, Haws Integrated™ makes it easy for customers to fulfill their needs by offering comprehensive services for an effortless emergency solution, giving peace of mind that you are making the smartest, safest decision for your facility.

Haws Integrated designs, builds and manages standard and custom-engineered industrial safety response systems that provide tempered water for decontamination and emergency wash installations.

SERVICES INCLUDE:

- Project Planning and Requirements Discovery
- Regulatory Compliance Consulting
- Specification Development and Translations
- Detailed Engineering and Customized Design
- System Build and Factory Acceptance Testing
- Complete Site Integration including Start-Up Services and On-Site Training
- System Maintenance Testing and Management
- Third-Party Certification Coordination



WHY HAWS INTEGRATED?

SAFETY STANDARD EXPERTISE

Immediate access to regulatory requirement experts

COST MINIMIZATION

Early project design and specification involvement to reduce costs and change orders

SITE INTEGRATION

Safety system incorporation with existing operations and controls

STANDARDS COMPLIANCE

Project evaluation and analysis for ongoing ANSI compliance

COMPLETE SOLUTION

Thorough and comprehensive custom emergency response system

CONTINUOUS SUPPORT

On-going project life-cycle support and maintenance services

PROJECT CERTAINTY

Knowledgeable, solution specific experience

ARE YOU ANSI COMPLIANT?

EMERGENCY EYEWASH AND SHOWER EQUIPMENT COMPLIANCE

Published by International Safety Equipment Association, ANSI Z358.1 establishes minimum performance and use requirements for eyewash and shower equipment.

SIGNIFICANT REQUIREMENTS FOR SIMULTANEOUS USE INCLUDE:

- Eyewash must deliver a minimum of 0.4 gallons per minute (1.5 LPM) or 3 gallons per minute (11.4 LPM) for an eye/face wash
- Drench shower must deliver a minimum of 20 gallons per minute (75.7 LPM)
- Must be capable of simultaneous use
- Must deliver tepid flushing fluid, defined as 60° - 100° F (16° - 38° C)

WHY TEPID WATER? Providing The Right Water Temperature Will Provide a Comfortable Flushing Environment and Encourage a Full 15-Minute Flush To:

- Help cool burns
- Help prevent hypothermia
- Help prevent chemical absorption
- Minimize further injury



AXION® MSR: YOUR BEST PRACTICE FOR EMERGENCY RESPONSE



AXION's ground-breaking designs continue to change the emergency response landscape by offering the only medically superior response solution in the industry. AXION MSR products provide a complete ANSI compliant safety solution coupled with enhanced victim comfort and injury reduction.

ISEA /ANSI Z358.1

REQUIRES THAT A CONTROLLED FLOW OF FLUSHING FLUID IS PROVIDED AT A VELOCITY LOW ENOUGH TO BE NON-INJURIOUS TO THE USER.

AXION® EYE/FACE WASH

INJURY REDUCTION

Inverted wash streams clear the eye by gently sweeping contaminants away from the eye interior and nasal cavity helping reduce further injury.

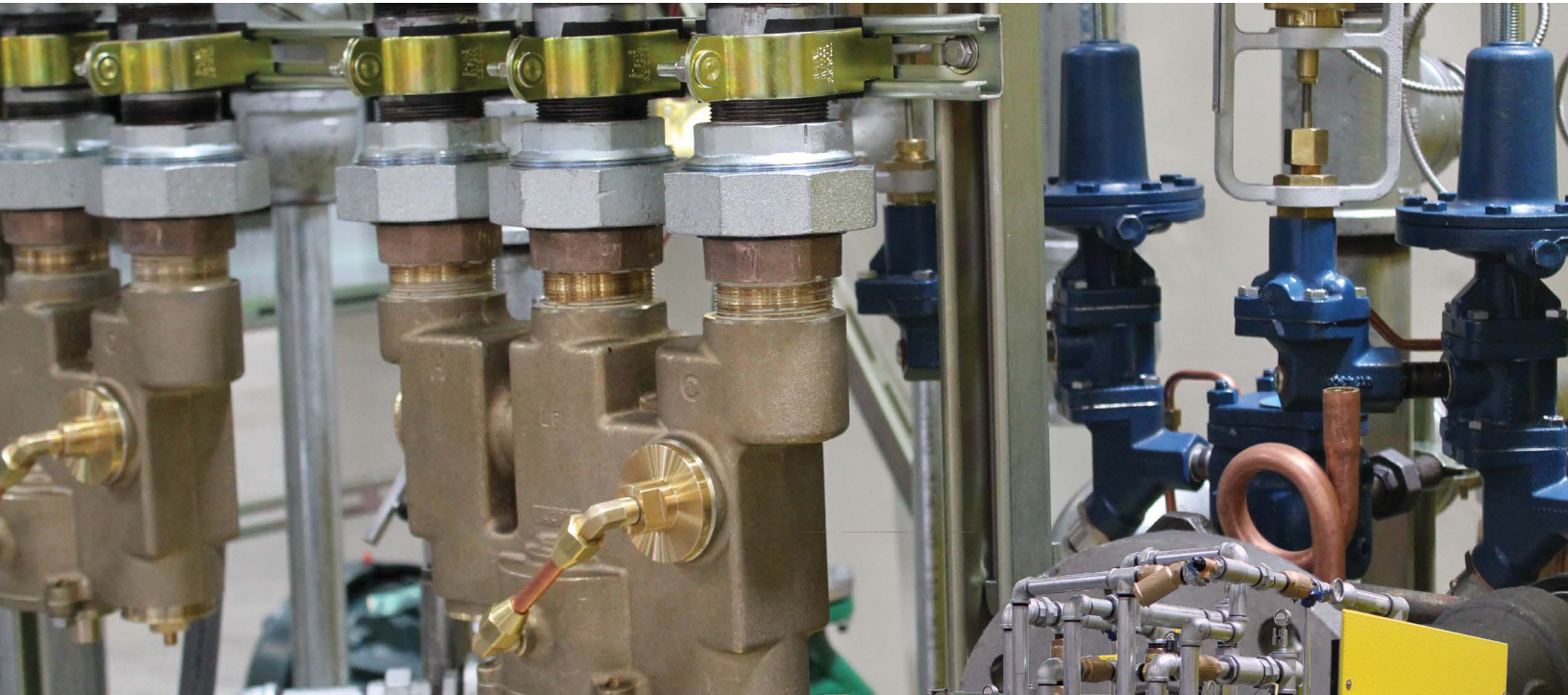
INCREASED VICTIM COMFORT

Laminar flow eye/face wash streams provide even, consistent, predictable stream height for greater user comfort, encouraging use for the full 15-minute ANSI Z358.1 requirement.

MEDICALLY SUPERIOR

AXION MSR is the only eye/face wash duplicating the "inside-out" flushing methodology recommended and used by medical professionals.

AXION® MSR: VALVES



Medically-superior AXION MSR technology combined with *Haws Integrated* custom engineering provides your facility a complete ANSI compliant safety response system.

AXION® VALVES

INJURY REDUCTION

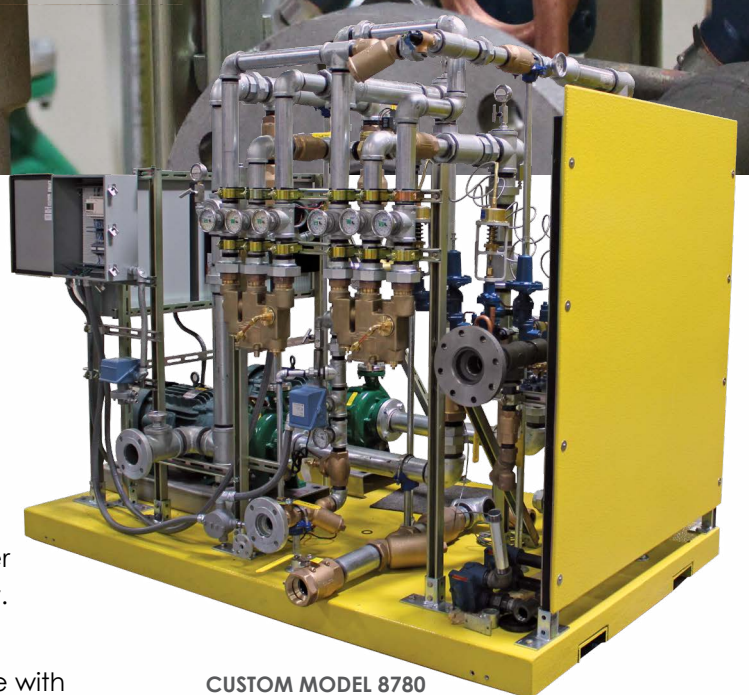
Redundant anti-scald protection with internal cold water bypass and positive shut off helping reduce further injury.

INCREASED VICTIM COMFORT

Wax-based thermostat technology for fast response time with reliable temperature control.

FAIL-SAFE PROTECTION

Highest cold water bypass flow rate in the industry and lowest internal pressure drop to guarantee functionality.



CUSTOM MODEL 8780

PERFORMANCE SERIES

Water Tempering Solutions

The Performance Series provides ANSI Z358.1 compliant tempered water solution options with reduced lead time and price by offering standardized configurations to meet your decontamination needs. With multiple tank, electrical and blending capability options, the Performance Series will be sure to have your complete solution. All units are built and pre-tested for immediate usage.



- Standard & Customizable Configurations
- Reduced Lead Time
- Price & Resource Efficient
- ISEA /ANSI Z358.1 Compliant for full 15-minute flush
- CSA Hazardous Location Certifiable
- Enhanced Maintenance Safety Features
- Fully Assembled and Engineer Tested
- AXION® MSR Advanced Victim Comfort
- Anti-Scald Protection
- Full-Flow Cold Water Bypass
- Standard Electrical Systems in Various Voltages
- Advanced Programmable Monitoring Control System
(select models only)

ALL PERFORMANCE SERIES MODELS HAVE MULTIPLE TANK AND ELECTRICAL OPTIONS AVAILABLE.



8710



8720

8710 - PERFORMANCE SERIES

Model 8710 is a shower and eye/face wash heated booth supplying tempered water for emergency response situations in all-weather conditions. Unit has an internal hot water supply tank and an AXION thermostatic mixing valve, incorporating full-flow cold water bypass features. The unit combines the use of a 20 GPM (75.7 LPM) AXION showerhead, a 3.7 GPM (11.4 LPM) AXION eye/face wash head for the irrigation process, and a 3 GPM (11.4 LPM) drench hose. The 5' x 9' (1.52 x 2.74 m) fiberglass-reinforced structure is covered with a bright yellow, chemically-resistant, water-proof coating and is protected with UV inhibitors for increased durability. The booth also features an internally-mounted 2.5 kW space heater, spring-loaded self-closing doors, an equipment room door, removable service door, freeze and scald protection bleed valves, fiberglass floor grate, and 3" IPS drain. During an emergency, a flow switch activated alarm is sounded and a flashing warning light is triggered. Unit has an R-value of 11.

8720 - PERFORMANCE SERIES

Model 8720 is an enclosed emergency shower and eyewash with overhead water storage for use in areas with no water supply. The 4.6' x 4.5' (1.4 m x 1.37 m) unit is an all-weather fiberglass-reinforced structure is covered with a bright yellow, chemically-resistant, water-proof coating, protected with UV inhibitors. The plug 'n play booth includes quick electrical disconnects, an internally-mounted 2.5 kW or 1350 W space heater for internal booth temperature control, dual spring-loaded self-closing shower doors, a fiberglass floor grate, and 3" IPS drain. The overhead 450-gallon (1703 L) tank is made of fiberglass with an immersion heater for water temperature maintenance. The emergency flushing is provided by use of a 20 GPM (75.7 LPM) AXION showerhead and a 3 GPM (11.4 LPM) AXION eye/face wash head for irrigation, and maintains ISEA/ANSI Z358.1 compliance for the full 15-minute flush period. Unit has an R-value of 11.

PERFORMANCE SERIES



8730



8760

8730 - PERFORMANCE SERIES

Model 8730 is an enclosed shower and eye/face wash with an all-weather, fiberglass-reinforced structure covered with bright yellow, chemically-resistant, water-proof coating and protected with UV inhibitors. This 5' x 4' (1.52 m x 1.22 m) unit includes an internally-mounted 2.5 kW space heater for internal booth temperature control. The unit combines the use of a 20 GPM (75.7 LPM) AXION showerhead, a 3.7 GPM (11.4 LPM) AXION eye/face wash head for the irrigation process, and a 3 GPM (11.4 LPM) drench hose, freeze and scald protection bleed valves, dual spring-loaded self-closing shower doors, a fiberglass floor grate, and 3" IPS drain. During an emergency, a flow switch activated alarm is sounded and a flashing warning light is triggered. Unit has an R-value of 11.

8760 - PERFORMANCE SERIES

Model 8760 is a skid-mounted tempered water shower and eye/face wash with a membrane encapsulated and fiberglass-reinforced structure, and safety yellow elastomeric chemically-resistant waterproof coating with UV inhibitors. This 5' x 5' (1.52 x 1.52 m) unit has an internal hot water supply tank and an AXION thermostatic mixing valve, incorporating fail-safe anti-scald protection and full-flow cold water bypass features, and a flow switch activated alarm and flashing warning light. The unit combines the use of a 20 GPM (75.7 LPM) AXION showerhead, a 3.7 GPM (11.4 LPM) AXION eye/face wash head for the irrigation process, and a 3 GPM (11.4 LPM) drench hose. Model shown is a customized 8760.



8780



8785

8780 - PERFORMANCE SERIES

The skid-mounted model 8780 tempering series provides tepid water solutions for a variety of drench shower and eye/face wash systems in non-freezing environments. The 5' x 5' (1.52 x 1.52 m) blending system includes an integral hot water supply tank and AXION thermostatic mixing valve, and incorporates fail-safe anti-scald protection and full flow cold water bypass features. Constructed of encapsulated membrane and fiberglass, the reinforced structure is covered with a bright yellow elastomeric, chemically-resistant, water-proof coating and protected with UV inhibitors for increased durability. Model shown is a customized 8780.

8785 - PERFORMANCE SERIES

Enclosed and heated tempering station, Model 8785 includes an integral hot water storage supply tank, internally-mounted 2.5 kW space heater, and AXION thermostatic mixing valve. The fiberglass-reinforced structure is covered with a bright yellow, chemically-resistant, water-proof coating and protected with UV inhibitors for increased durability. This 5' x 5' (1.52 x 1.52 m) unit is specifically designed to supply tempered water to emergency shower and eye/face wash systems in freezing environments and includes an equipment room door and removable service door. Unit has an R-value of 11.

TEMPERED WATER SYSTEMS



9326

9326

Model 9326, electric water heating system, is specifically designed to provide safety showers and eye/face washes with an unlimited supply of tepid water. This unit provides the opportunity for space and energy conservation with no need for large water storage tanks or the continuous energy demand to maintain required temperatures. In addition, the on-demand system eliminates any "recovery time" required to reheat large storage tanks after use. The unit is enclosed in a NEMA 4 rated cabinet and is manufactured from NSF-61 listed materials. Additional features include: active energy management to ensure optimal application of energy based on real-time systems demands, a thermo-optical sensor for protection against entrained air or improper commissioning, high-capacity flow meter with inlet and outlet temperature sensors, and on-board diagnostics with digital LCD display. The compact power delivers up to 21 kW per heating chamber with 6 total chambers.

Max flow up to 40 GPM (151.4 LPM). Unit size: 24"H x 30"W x 12.8125"D (60.96 cm x 76.2 cm x 32.54 cm), weight: 68 lbs. (30.84 kg). *(Unit is not for use in freezing environments)*

The unit is also available in a Type 304 stainless steel NEMA 4X enclosure, Model 9327.

Additional options are available.

9400

Model 9400, AXION steam water heater, replaces hot water tanks when pressurized steam is available. When an emergency shower or eyewash is activated, the 3-25 GPM (11-95 LPM) water flow opens a steam control valve. The steam enters a brazed plate heat exchanger, instantly heating the water. An ASSE 1071 certified AXION thermostatic mixing valve blends hot and cold water to produce an output of 80°F (27°C) tepid water. Additional valves keep the system preheated, freeze protected and scald protected. The steam valve will remain closed should there be a loss of water pressure.

A low-pressure system is also available for 15-30 PSIG (1-2 BAR) steam, Model 9400.LPS. Additional customizable PSI options available.



9400

CUSTOMIZED SAFETY SOLUTIONS

EMERGENCY RESPONSE CUSTOMIZATION OPTIONS INCLUDE:

- Large-scale water tempering systems
- Turnkey decontamination and drench booth systems
- Transportable water tempering skids
- Water pumping systems
- Waste heat re-capture
- Gravity-fed and air-charged systems



8770

A gravity-fed emergency shower and eyewash, Model 8770 is a galvanized steel structure with bright yellow elastomeric chemically-resistant, waterproof side panels and a 450-gallon (1703 L) overhead tank. The emergency flushing is provided by the use of a 20 GPM (75.7 LPM) AXION showerhead and a 3 GPM (11.4 LPM) AXION eye/face wash head for the irrigation process. This system is designed to operate with a number of site specific tempering and electrical options.

9003N (NEMA 4) / 9003C (C1D1)

Dual wireless safety shower and eyewash alarm transmitters enable real-time monitoring including activation time/date stamp, signal and battery strength. The Honeywell Limitless™ product includes activation brackets and all hardware necessary for mounting to most Haws freestanding shower and eyewash products. Single transmitter, model 9004N/9004C.

9003R

Receiver for a wireless transmitter, the din-rail or panel-mountable receiver is designed to receive a wireless signal from a Honeywell Limitless™ digital input, and communicates the digital input status (i.e. switch open or closed) to a PLC (programmable logic controller) or any host controller capable of NPN/PNP-type inputs. Accommodates up to 14 digital inputs.



Haws
Integrated
ENGINEERED SOLUTIONS® FOR SAFETY





CUSTOM MODEL 8785

CUSTOM MODEL 8760

CUSTOM MODEL 8780

As an ISO 9001 certified company, *Haws* is committed to providing solutions that help keep people safe through an unrelenting focus on quality, service and innovation. For more than 60 years, *Haws* has specified and supplied custom engineered tempered water and emergency eye/face and shower solutions to a variety of companies including those listed below:

CUSTOMERS INCLUDE:

- 3M
- AKZO Nobel
- BASF
- BP
- Chevron
- Conoco
- Dow
- DuPont
- Eastern Petrochemicals (SHARQ)
- Exxon Mobil (Onshore, Offshore, Chemical)
- IBM
- Momentive Chemical
- Nova Chemicals
- Vale Inco
- RockTenn

ENGINEERING, PROCUREMENT & CONSTRUCTION FIRMS:

- Bechtel
- CH2M Hill
- Fluor
- Foster Wheeler
- Jacobs
- JGC
- M & W
- Petrofac
- Samsung
- Snamprogetti
- SNC Lavalin
- Tecnicas Reunidas
- Technip
- Toyo
- Worley Parsons

AXION[®] TEMPERED WATER...
THE MEDICALLY SUPERIOR RESPONSE[®]



ENGINEERED SOLUTIONS[®] FOR SAFETY