Dedicated To Safety...

Cable Heated Insulated Solutions (ISTEC Type ES/ESW-ICH)
Cubicle Cabins (ISTEC Type ESW-CCM)
Decontamination Units (ISTEC Type DECO)
Overhead Water Tank Solutions (ISTEC Type ESW-OWT)
Mobile Showers with Trail (ISTEC Type ESW-MSS)
Separate Header Tanks (ISTEC Type SHT)
IST ISCI SAGLIGI TECHIZATI CO., LTD. produces a complete range of equipment and systems for

**Occupational Safety • Worker’s Health**

**Civil Defence**

**Fire & CBRN & Personal Protection**

since 1979.

Headquarters and factories are located in Ankara and two sales offices are located in Istanbul. Our operations extend around the country through our distributors.

Our products are certified according to 89/686/EEC personal protection equipment directive and related harmonized European Standards. Our company has EN-ISO 9001:2008 Quality System Certificate.

IST Safety production includes,

**Emergency Showers & Eyewashes • Multi-Functional Protective Clothings • Fire Fighting Suits**

**Aluminized Fire Proximity Suits • Heat and Flame Protective Clothings for Industrial Purposes**

**Protective Clothings against molten metal and aluminium splash and radiant heat • Arc Flash Clothings**

**Air Cooled Kiln Entry Suits • Fire Blankets • Airline Breathing Systems**

**• Safety Storage Cans & Plunger Cans**

To maintain our position at the forefront of protective equipment technology, we operate with the most complete and well funded R&D facilities in the safety equipment industry.

IST Safety’s R&D Team continuously improves products according to EN Standards and performs product testing at our own laboratories.

ARITAN, FYRPRO, FYRAL, FYRTEX, ELECTPRO, HEATPRO, ISTAIR, ISTEC, SAFECAN and IST are our registered brands.
Scope

Part 1 covers plumbed in body showers for use in laboratories
Part 2 covers plumbed in eye shower for use in all environments
Part 3 covers tank (non-plumbed) body showers
Part 4 covers tank (non-plumbed) eye/face showers
Part 5 is currently in the planning phase and will cover plumbed in showers in production sites

Main recommendations

Flow rates

For body showers in labs the standard specifies that local standards on flow rates should apply and where no local standard is present a flow of 60 l/min should be used.
For plumbed in eyewashes the flow rate should be minimum 6 litres per minute.
In both cases the flow should be available for at least 15 minutes

Spray patterns

For body showers the standard recommends that at a distance of 700 mm below the shower head 50% of the water will fall within a 200 mm radius circle. 95% of the water will fall within a radius of 400 mm
For eye showers the jets should reach a minimum of 100 mm from the centre of the spray head spraying directly upwards. The maximum reach for the jets should be 300 mm spraying directly upwards.

Water quality and temperature

The water should be of potable quality.
There is not firm recommendation in the standard as to water temperature, however, there is an advisory appendix which suggests that the temperature of the water should be maintained between 15 and 37°C

Product selection implications

All our emergency showers and eyewashes are built to conform to the EN 15154 standards.

ANSI Z358.1-2009 REQUIREMENTS

ANSI Z358.1-2004 contains provisions regarding the design, performance, installation, use and maintenance of various types of emergency equipment (showers, eye washes, drench hoses, etc.). Sections in the standard addresses how the equipment should perform, as well as testing procedures to ensure proper operation, installation, maintenance and training.

Requirements for the ANSI Z358.1

Employees must be trained in the location of emergency equipment and in its proper use.
Emergency equipment must be regularly maintained (including weekly activation of the equipment) to assure that it is in working order and inspected at least annually for compliance with the standard.
A response plan to be used in the event that an accident does occur must be developed. For example; installing an alarm unit with any emergency eye wash or shower unit.
Emergency equipment be installed within 10 seconds walking time from the location of a hazard.
The water temperature delivered by emergency equipment should be "tepid". For example: mixing valves to blend and temper water can be used.
Disposal of the water should not create a threat.
For example; drain pipings can be used.
ISTEC TYPE ES-ICH / ESW-ICH FREEZE PROOF CABLE HEATED AND INSULATED EMERGENCY SHOWER, EYEWASH (OUTDOOR USE FOR COLD CLIMATES)

Protective against Freezing with cable heating (10-15 W/m, AC 230 V, Ex-Proof) and complete insulating system
Suitable for extreme cold weather conditions

P/N: 15026100 / 15036100 (Stainless Steel)
P/N: 15026150 / 15036150 (Galvanized Steel)

Push Handle Control for Eyewash, Pull Rod Control for Shower
Available for hazardous and non-hazardous areas
10-15 W/m, AC 230 V, Ex-Proof Cable Heating with Insulation for freeze protection
Shower Material: 304 Stainless Steel or Galvanized Steel
Pipes: 1 1/4" Stainless Steel or Galvanized Steel
Shower Head and Eyewash Bowl: 300 mm diameter, Stainless Steel or Galvanized Steel
Water Inlet : 1"
Water Outlet: 1 1/4 "
Water Flow: Minimum 11.4 lt/min for eyewash
Minimum 75.7 lt/min for shower

OPTIONS

- Ex-proof Mechanical Thermostat
- Ex-proof or non Ex-proof Audible and Visual Alarm
- Scald Protection Valve
- Shower activation Platform
- Eyewash Foot Treadle
- Overhead ABS shower Rose
- 316 Stainless Steel Shower Material
- Flow Switch

Atex and Gost Certification Available
In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009
FEATURES

Standard 630 lt Overhead Tank Showers supply 15 minutes flow rate according to the standard requirements on the condition of being connected to mains supply that provides water in minimum 2-3 bar pressure.

Different materials (Galvanized Steel, Stainless Steel, GRP) can be used in different system parts as optionally.

You can customize your tank shower system by selection guide to integrate the system by chosen desired accessories and various system parts.

Water Tanks are insulated.

An integral immersion heater or a chiller unit can be added to the system with the options of ex-proof and non-ex-proof, in order to keep the water temperature constant between 15-38 °C.

Heating and cooling capacities may be changed according to customer requirements.

Shower Head: 300 mm diameter
Eyewash Bowl: 300 mm diameter
Water Inlet: 1 ½” with flange
Water Outlet: 1 ¼”
Water Flow: Minimum 11,4 lt/min for eyewash
Minimum 75,7 lt/min for shower

Available in green, yellow or white color

Atex and Gost Certification Available

In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009

Guarantees correct flow rate and 15 minutes of a tepid water supply

OPTIONS

Ex-proof Or Non-Ex-proof Audible And Visual Alarm
Ex-proof Or Non-Ex-proof Chiller Cooling unit (for hot climates)
Water Immersion Heater (for cold climates)
Scald Or Freeze Protection Valve
Testing Lever
Eyebath Foot Treadle
Overhead ABS Shower Rose
316 Stainless Steel Shower Material
Overhead Sun Canopy
Low Water Level Alarm
Side & Rear Panelling
Visual Water Level Indicator
Visual Water Temperature Gauge
Water Low And High Temperature Alarm

Drain Sump and Grating
Internal or External lighting
Shower activation platform
Eyewash may be located internally on LHS or RHS externally on LHS or RHS when viewed in front
Ex-proof space heater
Ex-proof or non-ex-proof flow switch
Pressure regulator
Stainless Steel erecting lug
Thermo mixing valve
Wooden Toilets
IDS Electrical Box
Side and rear panels insulation / Water Tank insulation
Platform Activation

MATERIAL OPTIONS

Overhead Water Tank (630 lt • 1260 lt)
Overhead Water Tank (Other Capacities)
Emergency Shower and Eyewash
Main Frame
Side Panels (Cabin Walls)
Drain Sump
Panic Bar (Push Bar)
Foot treadle for eyewash
Platform Activation

Galvanized Steel Stainless Steel 304 Stainless Steel 316 GRP (Glasfiber Reinforced Plastic)

OOO “ТИ-СИСТЕМС”
ISTEC TYPE ESW-OWT EMERGENCY SHOWER AND EYEWASH
OVERHEAD WATER TANK (1260 LT)

FEATURES

Standard 1260 lt Overhead Tank Showers guarantee 15 minutes of water flow according to the standard requirements in bellow circumstances:
1. Without mains (water) supply connection
2. In low water pressure
3. Interruption of flow in existing water supply connection

Different materials (Galvanized Steel, Stainless Steel, GRP) can be used in different system parts as optionally.

You can customize your tank shower system by selection guide to integrate the system by chosen desired accessories and various system parts.

Water Tanks are insulated.

An integral immersion heater or a chiller unit can be added to the system with the options of ex-proof and non-ex-proof, in order to keep the water temperature constant between 15-38 °C.

Heating and cooling capacities may be changed according to customer requirements.

Shower Head: 300 mm diameter
Eyewash Bowl: 300 mm diameter
Water Inlet: 1 ½” with flange
Water Outlet: 1 ¼”
Water Flow: Minimum 11.4 lt/min for eyewash
Minimum 75.7 lt/min for shower

Available in green, yellow or white color

Atex and Gost Certification Available
In accordance with EN 15154-1 & EN 15154-2
& ANSI Z358.1-2009
Guarantees correct flow rate and 15 minutes of a tepid water supply

OPTIONS

- Ex-proof Or Non Ex-proof Audible And Visual Alarm
- Ex-proof Or Non Ex-proof chiller cooling unit (for hot climates)
- Water Immersion Heater (for cold climates)
- Scald Or Freeze Protection Valve
- Testing Lever
- Eyebath Foot Treadle
- Overhead ABS Shower Rose
- 316 Stainless Steel Shower Material
- Overhead Sun Canopy
- Low Water Level Alarm
- Side & Rear Paneling
- Spring Loaded Dial
- Visual Water Level Indicator
- Visual Water Temperature Gauge
- Water Low And High Temperature Alarm
- Ex-proof Or Non Ex-proof Flow Switch
- Pressure Regulator
- Stainless Steel erecting lugs
- Thermo mixing valve
- Vertical Pullers
- MSB Electrical Box
- Side and rear panes insulation / Water Tank insulation
- Panic Bar / Push Bar
- Platform Activation

 Drain Sump and Grating
Ex-proof or non-ex-proof space heater
Internal or external lighting
Shower activation platform
Eyewash may be located internally on LHS or RHS or externally
LHS or RHS when viewed in front
Ex-proof space heater
Ex-proof or non-ex-proof flow switch
Pressure regulator
Stainless steel erecting lugs
Thermo mixing valve
Vertical Pullers
MSB Electrical Box
Side and rear panes insulation / Water Tank insulation
Panic Bar / Push Bar
Platform Activation
FEATURES

In accordance with EN 15154-1-2 and ANSI Z358.1-2009.
Available for indoor and outdoor applications.
Produced from galvanized steel as standard (Optionally 304 stainless steel, 316 stainless steel or GRP material).
Mains Water System is recommended as 2-3 bars.
GRP Grating non slipping floor.
Testing lever.
Integrated drain sump.

Shower Head: 300 mm diameter
Eyewash Bowl: 300 mm diameter
Water Inlet: 1 ½” with flange
Water Outlet: 1 ¼”
Water Flow: Minimum 11.4 lt/min for eyewash
       Minimum 75.7 lt/min for shower

OPTIONS

- Ex-proof Or Non Ex-proof Audible And Visual Alarm
- Eyewash may be located internally on LHS or RHS or externally LHS or RHS when viewed in front.
- Eyewash foot treatle.
- Water inlet with flange connection.
- Internal or External lighting.
- Low water level alarm.
- Spring loaded doors.
- Curtain.
- Cable heating.
- Wooden Pallets.
- Panic Bar / Push Bar.
- Platform Activation.
- Drain Sump and Grating.
- Overhead ABS Shower Rose.
- Scald Or Freeze Protection Valve.
- Stainless steel erecting lugs.
- Ex-proof or non ex-proof flow switch.

MATERIAL OPTIONS

<table>
<thead>
<tr>
<th>Material</th>
<th>Cubicle Cabin Frame</th>
<th>Side &amp; Rear Panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galvanized Steel</td>
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<tr>
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<tr>
<td>GRP</td>
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</tbody>
</table>

S: STANDARD
O: OPTIONAL

Atex and Gost Certification Available

Guarantees correct flow rate and 15 minutes of a tepid water supply.
In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009
For outdoor applications
Options for hazardous and non-hazardous areas
Applicable for ambient temperatures of - 40 °C / + 55 °C
Insulated Cubicle (50 mm Polyuretane)
Space Heater
Spring activated doors
Produced from galvanized steel as standard (Optionally 304 stainless steel, 316 stainless steel or GRP material)
GRP Grating non slipping floor
Testing lever
Integrated drain sump

Shower Head : 300 mm diameter
Eyewash Bowl: 300 mm diameter
Water Inlet : 1 ½" with flange
Water Outlet : 1 ¼"
Water Flow : Minimum 11.4 lt/min for eyewash
Minimum 75.7 lt/min for shower

Atex and Gost Certification Available
Guarantees correct flow rate and 15 minutes of a tepid water supply

Options
- Ex-proof Or Non Ex-proof Audible And Visual Alarm
- Eyewash may be located internally on LHS or RHS or externally LHS or RHS when viewed in front
- Eyewash foot treadle
- Water inlet with flange connection
- Internal or External lighting
- Low water level alarm
- Curtain
- Cable heating
- Wooden Pallets
- Panic Bar / Push Bar
- Platform Activation
- Drain Sump and Grating
- Overhead ABS Shower Rose
- Scald Or Freeze Protection Valve
- Stainless steel erecting lugs
- Ex-proof or non ex-proof flow switch

Features

Material Options

<table>
<thead>
<tr>
<th>Cubicle Cabin Frame</th>
<th>Outer Cover</th>
<th>Interior Cover</th>
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<tbody>
<tr>
<td>Galvanized Steel</td>
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<td>GRP</td>
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</tr>
</tbody>
</table>

$ : STANDARD
O : OPTIONAL
**Features**

Standard 1260 lt Overhead Tank Showers guarantee 15 minutes of water flow according to the standard requirements in the following circumstances:

1. Without mains (water) supply connection
2. In low water pressure
3. Interruption of flow in existing water supply connection

Ideal for applications where there is no mains water supply

- 1500 lt Water Tank on trailer
- Trailer is equipped with signals, lights, oblong plate, parking brake etc., according to highway regulations
- Suitable for temperatures -5°C / +40°C
- Stainless Steel emergency shower and eyewash
- Emergency Shower Material (Galvanized and Painted Steel or Stainless Steel)
- Pneumatic Water Pump For Hazardous Areas
- Electrical Pump For Non-Hazardous Areas
- 50 lt 200 Bar air cylinder with pressure regulator (for operating of pneumatic pump) with its brackets & straps
- Stabilizing legs
- Bumper Bar
- Visual water level indicator
- Extention Tank
- Safety Signs and Green - White stripes

Available in green, yellow or white color

**Options**

- Ex-proof or Non Ex-proof Audible And Visual Alarm
- Ex-proof or Non Ex-proof chiller cooling unit
- Ex-proof or Non Ex-proof Lighting
- Scalid or Freeze Protection Valve
- Testing Lever
- Eyewash Foot Treadle
- Overhead ABS Shower Rose
- 3 ½ Stainless Steel Shower Material
- Water Pressure Regulator
- Low Water Level Alarm
- Visual Water Level Indicator
- Visual Water Temperature Gauge
- Water Immersion Heater
- Water Low And High Temperature Alarm

Atex and Gost Certification Available

In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009

Guarantees correct flow rate and 15 minutes of tepid water supply

**ISTEC TYPE SHT SEPARATE HEADER TANK**

**Features**

Standard 1260 lt Overhead Tank Showers guarantee 15 minutes of water flow according to the standard requirements in the following circumstances:

1. Without mains (water) supply connection
2. In low water pressure
3. Interruption of flow in existing water supply connection

Manufactured from galvanized steel and Stainless steel material

Ideal to deliver water along 15 minutes for areas where no mains supply or interrupted water supply and enough space.

- Different material options (Galvanized Steel, Stainless steel, GRP)
- Available also for capacity of 30 minutes of water supply
- Options for non-hazardous or hazardous areas
- Available in green, yellow or white color
- Safety Signs and Green - White stripes

**Options**

- Ex-proof or Non Ex-proof chiller cooling unit
- Water Immersion Heater
- Water Low And High Temperature Alarm
- Visual Water Level Indicator
- Visual Water Temperature Gauge
- Overhead sun canopy
- Drain valve
- Flanged inlet
- Submersible Pump
ISTEC TYPE EW-P PORTABLE EYEWASH

FEATURES

- Decontamination Showers provides sanitation and decontamination to the people exposed to chemical or biological agents, as well as to extinguish burning clothes.
- Autostart once stepped on the platform.
- 14 spray nozzles sprays necessary water to whole body.
- Swivelling spray provides easy decontamination.
- Stainless Steel or Galvanized and Painted steel material options
- Optionally be added side & rear panels and grating
- Options for hazardous and non-hazardous areas

OPTIONS

- Ex-proof or Non Ex-proof Audible And Visual Alarm
- Ex-proof or Non Ex-proof Lighting
- Eyewash Foot Treadle
- 316 Stainless Steel Material
- Water Pressure Regulator
- Flanged inlet

Gost Certification Available

In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009

ISTEC TYPE DECO DECONTAMINATION UNITS

FEATURES

- Ideal for applications where there is no mains supply.
- Can easily be carried by two people.
- 2" filling plug, 25 lt. water capacity.
- Sprays aerated water. Rinses eyes and face with clean water by nozzles.
- Optionally operated by a trigger valve.
- Unlimited use by filling water and air.

OPTIONS

- Audible And Visual Alarm
- Eyewash Foot Treadle
- 316 Stainless Steel Material
- Water Pressure Regulator
- Flanged inlet
- Ex-proof or Non Ex-proof Lighting

With Trigger Valve
With Fixed Spray Nozzle