

# İŞÇİ SAĞLIĞI TEÇHİZATI

SANAYİ VE TİCARET LTD. ŞTİ.

Cable Heated Insulated Solutions (ISTEC Type ES/ESW-ICH)

Overhead Water Tank Solutions (ISTEC Type ESW-OWT)

Cubicle Cabins (ISTEC Type ESW-CCM)

Decontamination Units (ISTEC Type DECO)

Dedicated To Safety... Mobile Showers with Trailer (ISTEC Type ESW-MSS)



Ostim Mah. Ivedik OSB 31. Cad. 2269.Sk. No: 42 • 06374 Yenimahalle, Ankara, TURKEY

<del>2</del> +90 312 384 13 00



info@ist.com.tr

www.ist.com.tr

# **COMPANY OVERVIEW**

IST ISCI SAGLIGI TECHIZATI produces a complete range of equipments 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 world through our distributors.

Our products are certified according to 89/686/EEC Personal Protective 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 • 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 testings at our own laboratories.

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



# **EN 15154 REQUIREMENTS**

#### Scope

- Part 1 covers plumbed in body showers for use in laboratories
- Part 2 covers plumbed in eyewashes 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 lt /minute 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 eyewashes 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 C° 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 Z358.1-2009 contains provisions regarding the design, performance, installation, use and maintenance of various types of emergency equipment (showers, eyewashes, 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.

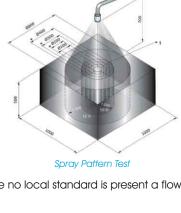
A response plan to be used in the event that an accident occurs must be developed. For example; installing an alarm unit with any emergency eyewash or shower unit.

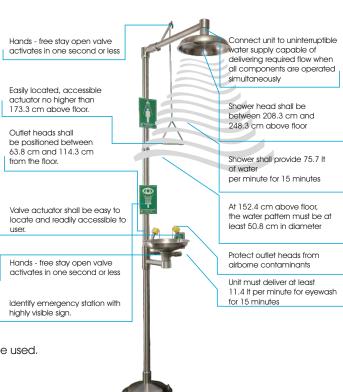
Emergency equipment is installed within 10 seconds walking time from the location of a hazard.

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.





# 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: 300 mm diameter, Stainless Steel or Galvanized Steel or ABS

Water Inlet: 1"

Water Outlet: 1 1/4 "

Water Flow: Minimum 11.4 lt/min for eyewash





### **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

# ISTEC TYPE ESW-OWT EMERGENCY SHOWER AND EYEWASH OVERHEAD WATER TANK (630 LT)

#### **FEATURES**

Standard 630 It 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 optionally.

You can customize your tank shower system by selection guide to integrate the system by 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 change according to customer requirements.

Shower Head: 300 mm diameter Eyewash Bowl: 300 mm diameter Water Inlet : 1  $\frac{1}{2}$ " with flange

Water Outlet: 1 1/4"

Water Flow: Minimum 11,4 lt/min for eyewash

Minimum 75,7 lt/min for shower

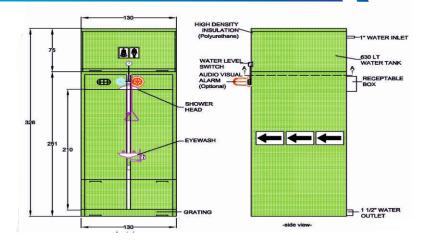
Available in green, yellow or white color.



# ATEX and GOST Certification Available

In accordance with EN 15154-1 & EN 15154-2 & ANSI Z358.1-2009 arantees correct flow rate and 15 minutes of a te

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
- Evewash Foot Treadle
- Overhead ABS Shower Rose
- ▲ 316 Stainless Steel Shower Material
- Overhead GRP Sun Canopy
- Low Water Level Alarm
- Side & Rear Panellina
- Spring Loaded Doors
- Visual Water Level Indicator
- ▶ Visual Water Temperature Gauge
- ▶ Water Low and High Tempature Alarm

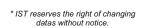
- Drain Sump and Grating
- Internal or External Lighting
- ► Shower Activation Platform
- ▶ Eyewash may be located internally on LHS or RHS or externally LHS or RHS when wieved in front
- Ex-proof Space Heater
- Ex-proof or Non Ex-proof Flow Switch
- ▶ Pressure Regulator
- ► Stainless Steel Erecting Lugs
- ▲ Thermo Mixing Valve
- Wooden Pallets
- M20 Electrical Box
- ▶ Side and Rear Panels Insulation / Water Tank Insulation
- Panic Bar / Push Bar







	Galvanized Steel	Stainless Steel 304	Stainless Steel 316	GRP (Glassfiber Reinforced Plastic)
Overhead Water Tank (630lt • 1260 lt)	•	•	•	•
Overhead Water Tank (Other Capacities)		•		•
Emergency Shower and Eyewash	•	•	•	
Main Frame	•	•	•	
Side & Rear Panels (Cabin Walls)	•	•	•	•
Drain Sump	•	•	•	•
Panic Bar (Push Bar)	•	•	•	
Foot Treadle for Eyewash	•	•	•	
Platform Activation		•	•	•
Grating		•	•	•



# ISTEC TYPE ESW-OWT EMERGENCY SHOWER AND EYEWASH OVERHEAD WATER TANK (1260 LT)

## **FEATURES**

Standard 1260 It Overhead Tank Showers guarantee 15 minutes of water flow according to the standard requirements in below 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 optionally.

You can customize your tank shower system by selection guide to integrate the system by 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 option 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  $\frac{1}{2}$ " with flange

Water Outlet: 1 1/4"

Water Flow: Minimum 11,4 It/min for eyewash

Minimum 75,7 lt/min for shower

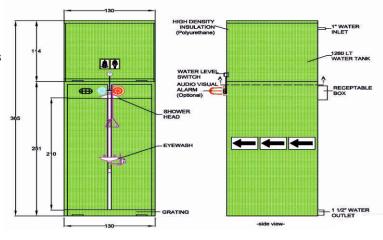
Available in green, yellow or white color.



### 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
- Eyewash Foot Treadle
- ► Overhead ABS Shower Rose
- ▶ 316 Stainless Steel Shower Material
- ▲ Overhead GRP Sun Canopy
- Low Water Level Alarm
- ▶ Side & Rear Panelling
- Spring Loaded Doors
- ▶ Visual Water Level Indicator
- ▶ Visual Water Temperature Gauge
- ▶ Water Low and High Tempature Alarm

- ▶ Drain Sump and Grating
- ▶ Internal or External Lighting
- Shower Activation Platform
- Eyewash may be located internally on LHS or RHS or externally LHS or RHS when wieved in front
- ► Ex-proof Space Heater
- Ex-proof or Non Ex-proof Flow Switch
- ▶ Pressure Regulator
- Stainless Steel Erecting Lugs
- ▲ Thermo Mixing Valve
- Wooden Pallets
- ▲ M20 Electrical Box
- Side and Rear Panels Insulation / Water Tank Insulation
- Panic Bar / Push Bar







# ISTEC TYPE ESW-OWT EMERGENCY SHOWER, EYEWASH SELECTION GUIDE

#### **FRAME**

GALVANIZED STEEL

2 304 STAINLESS STEEL 316 STAINLESS STEEL



#### **EMERGENCY SHOWER & PIPING & FITTINGS**

NONE (N/C)

GALVANIZED AND PAINTED STEEL

304 STAINLESS STEEL

316 STAINLESS STEEL



#### **EYEWASH & PIPING & FITTINGS**

0 NONE (N/C)

1 GALVANIZED AND PAINTED STEEL

2 304 STAINLESS STEEL

316 STAINLESS STEEL



#### **EYEWASH LID**

NONE (N/C)

GALVANIZED AND PAINTED STEEL

304 STAINLESS STEEL

316 STAINLESS STEEL 3



#### **FOOT TREADLE FOR EYEWASH**

NONE (N/C)

GALVANIZED AND PAINTED STEEL

304 STAINLESS STEEL

316 STAINLESS STEEL



#### **PANIC BAR / PUSH BAR**

NONE (N/C)

1 GALVANIZED AND PAINTED STEEL

304 STAINLESS STEEL

316 STAINLESS STEEL

#### **PLATFORM ACTIVATION**

NONE (N/C)

1 304 STAINLESS STEEL PLATFORM FOR EYEWASH

2316 STAINLESS STEEL PLATFORM FOR EYEWASH

GRP PLATFORM FOR EYEWASH

4 304 STAINLESS STEEL PLATFORM FOR EMERGENCY SHOWER

316 STAINLESS STEEL PLATFORM FOR EMERGENCY SHOWER

6 GRP PLATFORM FOR EMERGENCY SHOWER



#### **OVERHEAD WATER TANK**

630GLV 630 LT GALVANIZED STEEL

630S 630 LT STAINLESS STEEL

1260GLV 1260 LT GALVANIZED STEEL

1260S 1260 LT STAINLESS STEEL

OTHER (Stainless Steel or GRP).....



#### **INSULATION AND WALLS OF WATER TANK**

GALVANIZED AND PAINTED STEEL

304 STAINLESS STEEL

316 STAINLESS STEEL

GRP

GALVANIZED AND PAINTED STEEL (POLYURETHANE INSULATED)

3 304 STAINLESS STEEL (POLYURETHANE INSULATED)

316 STAINLESS STEEL (POLYURETHANE INSULATED)

GRP (POLYURETHANE INSULATED)

#### **CABIN WALLS (SIDE & REAR PANELS)**

O NONE (N/C)

GALVANIZED AND PAINTED STEEL

**2** 304 STAINLESS STEEL

316 STAINLESS STEEL

4 GRP

#### INSULATION OF CABIN WALLS AND SPRING LOADED DOORS

NONE (N/C)

GALVANIZED AND PAINTED STEEL (POLYURETHANE INSULATED)

304 STAINLESS STEEL (POLYURETHANE INSULATED)

3 316 STAINLESS STEEL (POLYURETHANE INSULATED)

#### **GRATING AND DRAIN SUMP**

NONE (N/C)

GRP GRATING + 316 STAINLESS STEEL DRAIN SUMP

GRP GRATING + 304 STAINLESS STEEL COLLECTION SUMP)

GRP GRATING W/O DRAIN SUMP



#### **HEATING UNIT**

NONE (N/C)

RN NON EX-PROOF HEATING COIL

**HEX** EX-PROOF HEATING COIL



#### **COOLING UNIT (CHILLER)**

NONE (N/C)

CN NON EX-PROOF CHILLER UNIT

**CEX** EX-PROOF CHILLER UNIT



#### **AUDIBLE & VISUAL ALARM**

O NONE (N/C)

AYN NON EX-PROOF (Made in Turkey)

AN NON EX-PROOF

**AEX** EX-PROOF



#### **M20 ELECTRICAL BOX**

NONE (N/C)

**EN** NON EX-PROOF

FX-PROOF



#### **INTERNAL & EXTERNAL LIGHTING**

NONE (N/C)

NON EX-PROOF

EX-PROOF



#### APPLICABLE OPTIONS FOR ALL ISTEC TYPE OWT MODELS

VISUAL WATER LEVEL INDICATOR

TEMPERATURE GAUGE

FN NON EX-PROOF FLOW SWITCH

FEX EX-PROOF FLOW SWITCH FC FREEZE PROTECTION VALVE

SC SCALD PROTECTION VALVE

PR PRESSURE REGULATOR

IN NON EX-PROOF LOW WATER LEVEL SWITCH

LEX EX-PROOF LOW WATER LEVE SWITCH

STAINLESS STEEL ERECTING LUGS FG WATER INLET WITH FLANGE

GG GRP OVERHEAD SUN CANOPY **AA** WOODEN PALLETS

TM THERMO MIXING VALVE





# ISTEC TYPE ESW-CCM CUBICLE CABIN MOUNTED EMERGENCY SHOWER AND EYEWASH

# For Indoor and Outdoor Applications

# **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 1/4"

**Water Flow**: Minimum 11,4 lt/min for eyewash Minimum 75,7 lt/min for shower

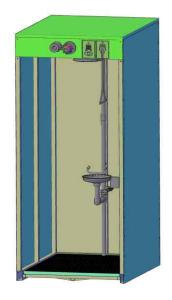
# **OPTIONS**

- 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 wieved in front
- Eyewash Foot Treadle
- 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**

	Cubicle Cabin Frame	Side & Rear Panels
Galvanized Steel	S	S
304 Stainless Steel	0	0
316 Stainless Steel	0	0
GRP	0	0

S: STANDARD
O: OPTIONAL





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



# ISTEC TYPE ESW-CCM CUBICLE CABIN MOUNTED EMERGENCY SHOWER AND EYEWASH

# **Insulated And Space Heated For Cold Climates**

# FEATURES



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 In accordance with EN 15154-1-2 and ANSI Z358.1-2009 For outdoor applications

Options for hazardous and non-hazardous areas

Applicable for ambient temperatures of -  $40 \,^{\circ}\text{C}$  / +  $55 \,^{\circ}\text{C}$  Insulated cubicle (50 mm Polyurethane)

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:  $1 \frac{1}{2}$ " with flange

Water Outlet: 1 1/4"

**Water Flow**: Minimum 11,4 lt/min for eyewash

Minimum 75,7 lt/min for shower





- ▶ Eyewash may be located internally on LHS or RHS
- ▶ Eyewash Foot Treadle
- ▶ Water Inlet with Flange Connection
- ▶ Internal or External Lighting
- Low Water Level Alarm
- ▲ Cable Heating
- Wooden Pallets
- Panic Bar / Push Bar
- ▶ Platform Activation
- Drain Sump and Grating
- Overhead ABS Shower Rose
- ▶ Stainless Steel Erecting Lugs
- ▶ Scald or Freeze Protection Valve
- Ex-proof or Non Ex-proof Flow Switch

# **MATERIAL OPTIONS**

	Cubicle Cabin Frame	Outer Cover	Interior Cover
Galvanized Steel	S	S	0
Aluminium	-	-	S
304 Stainless Steel	0	0	0
316 Stainless Steel	0	0	0
GRP	0	0	0

S : STANDARD
O : OPTIONAL



# ISTEC TYPE ESW-MSS MOBILE SAFETY SHOWER, EYEWASH WITH TRAILER (1500 LT)

#### **FEATURES**

Standard 1500 It Mobile Tank Showers guarantee 15 minutes of water flow according to the standard requirements in below 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 It Water Tank on trailer

Trailer is equipped with signals, lights, oblong plate, parking brake, etc. according to highway regulations Suitable for temperatures -5 C $^{\circ}$  / +40 C $^{\circ}$ 

Emergency Shower Material (Galvanized and Painted Steel or Stainless Steel)

Pneumatic Water Pump For Hazardous Areas Electrical Pump For Non Hazardous Areas

50 It 200 Bar air cylinder with pressure regulator

(for operating of pneumatic pump) with its bracket & straps Stabilizing legs

Bumper Bar

Visual water level indicator

**Expansion Tank** 

Safety Signs and Green - White stripes Available in green, yellow or white color



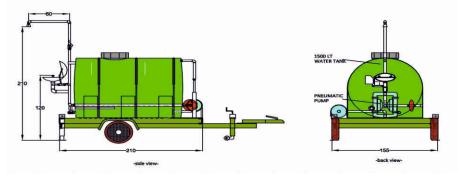
ATEX and GOST Certification Available

In accordance with EN 15154-1 & EN 15154-2 & ANSI 2358.1-2009

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
- Ex-proof or Non Ex-proof Lighting
- Scald or Freeze Protection Valve
- Testing Lever
- ▶ Eyewash Foot Treadle
- Overhead ABS Shower Rose
- Water Pressure Regulator
- Low Water Level Alarm
- Visual Water Level Indicator
- ▶ Visual Water Temperature Gauge
- ▶ Water Immersion Heater
- ▶ Water Low and High Temperature Alarm



# ISTEC TYPE SHT SEPARATE HEADER TANK

# **FEATURES**

Standard 1260 It Tanks guarantee

15 minutes of water flow according to the standard requirements in below circumstances;

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

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

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 GRP Sun Canopy
- Drain Valve
- Flanged Inlet
- Submersible Pump





# ISTEC TYPE DECO DECONTAMINATION UNITS

### **FEATURES**

Decontamination showers provide sanitation and decontamination to workers who exposed to chemical or biological agents as well as extinguish burning clothes.

Autostart once stepped on the platform.

14 spray nozzles spray necessary water to whole body.

Swivelling spray provides easy decontamination.

Stainless Steel or Galvanized and Painted Steel material options.

Optionally side & rear panels, curtain and grating can be added. 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
- **▲** GRP Platform
- ▶ 316 Stainless Steel Material
- ▶ Water Pressure Regulator
- ▶ Flanged Inlet
- Side & Rear Panels or Shelter
- Water Tank



# ISTEC TYPE EW-P PORTABLE EYEWASH

# **FEATURES**

Ideal for applications where there is no mains supply.

Can be carried by two people easily
2" filling plug, 25 It water capacity
Stainless Steel
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



With Trigger Valve

# **OPTIONS**

- Fixed Spray Nozzle
- ▲ Trigger Valve
- ▲ Trolley System

# GOST Certification Available

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

With Fixed Spray Nozzle





Ostim Mah. Ivedik OSB 31. Cad. 2269.Sk. No: 42 • 06374 Yenimahalle, Ankara, TURKEY

**7** +90 312 384 13 00

**+90 312 341 73 03** 



info@ist.com.tr

www.ist.com.tr