



I.T.E

IMEN TIAR

Engineering Co.

*WITH IMEN TIAR
THERE IS NO CHANCE FOR FIRE*



Certificate CH03.0256
ISO 9001 : 2008



IMEN TIAR

Manufacturer and Supplier of Fire Fighting & Safety Equipment

Introduction:

IMEN TIAR Engineering Company was established in 1999 and become a major Manufacturer and supplier of fire fighting equipment in recent years.

The main activities of I.T.E Co. are as following:

- 1) Manufacturing safety and Fire protection equipments.
- 2) Design and Installation of fire fighting systems.
- 3) Maintenance and service of the fire fighting systems.
- 4) After Sales services.

IMEN TIAR Company has the ISO 9001: 2008 quality control certificate for manufacturing fire fighting equipment.



Manufacturer and Supplier of Fire Fighting & Safety Equipment

HYDRANT

● DRY BARREL HYDRANT:

These hydrants are usually used in the cold areas and made according to AWWA-C502 standard.

Desc.	Model	TR-PH-D1	TR-PH-D2	TR-PH-D3	TR-PH-D4
Inlet Connection		4" , 6" , 8"	4" or 6"	2 ½"	4"
Hose Nozzle (2 ½") No.		2	2	1	2 , 3
Pumper Connection		4" , 4 ½" , 5" , 5 ½"	4" , 4 ½" , 5" , 5 ½"	-----	4"



| TR-PH-D1 |

| TR-PH-D2 |

| TR-PH-D3 |

● UNDER GROUND HYDRANT:

These Hydrants are made according to BS 750- Type 2 standard and have one 2 ½" outlet and one 3" inlet.



| TR-PH-UH1 |



| TR-PH-UH2 |

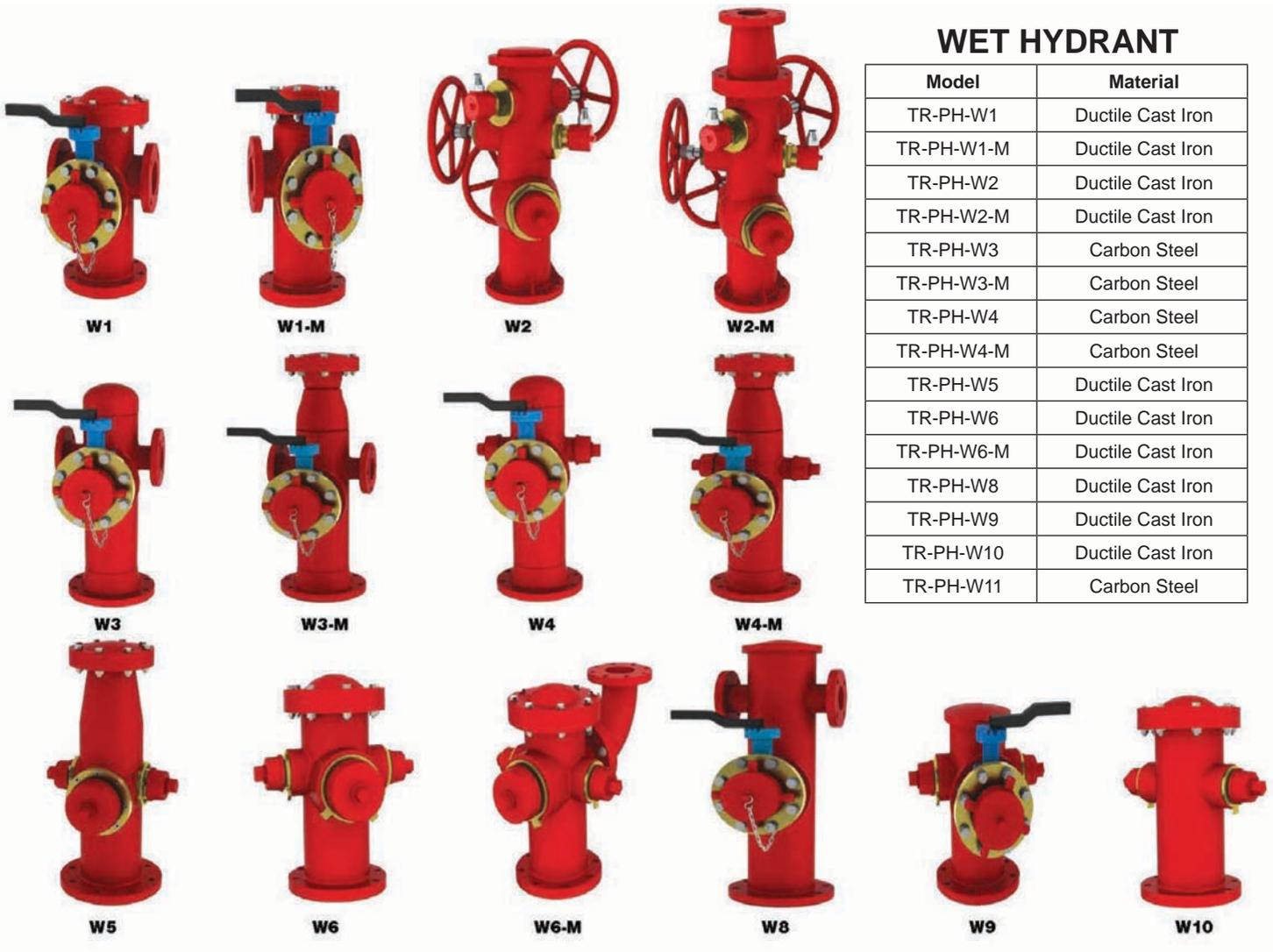


HYDRANT

● WET BARREL HYDRANT:

These types of Hydrants are usually used in the tropical areas and made according to AWWA-C503 standard.

The hydrants have two, three or four outlets and the inlet connection size of them is 4" or 6".



WET HYDRANT

Model	Material
TR-PH-W1	Ductile Cast Iron
TR-PH-W1-M	Ductile Cast Iron
TR-PH-W2	Ductile Cast Iron
TR-PH-W2-M	Ductile Cast Iron
TR-PH-W3	Carbon Steel
TR-PH-W3-M	Carbon Steel
TR-PH-W4	Carbon Steel
TR-PH-W4-M	Carbon Steel
TR-PH-W5	Ductile Cast Iron
TR-PH-W6	Ductile Cast Iron
TR-PH-W6-M	Ductile Cast Iron
TR-PH-W8	Ductile Cast Iron
TR-PH-W9	Ductile Cast Iron
TR-PH-W10	Ductile Cast Iron
TR-PH-W11	Carbon Steel



TR-PH-W11

POST VALVE

These kinds of valves are used for isolating the fire fighting hydrants and are made in two types of indicator
And post plate (Non-Indicator)

Desc.	Model	TR-PIV	TR-PNIV
Type		Indicator	Non- Indicator
Barrel Type		Fix / Telescoping	Fix
Valve Type		Gate / Butterfly	Gate
Valve Size		3" ~ 20"	3" ~ 20"





LANDING VALVE

● **Globe Valve:**

The Globe valves are made of copper alloy material according to BS5041 Part 1 standard.

The outlet standard of these valves is BS 336 instantaneous or storz.

Desc. Model	SG1	SG3	SG5	SG7	SG9
	SG2	SG4	SG6	SG8	SG10
Outlet Type	Horizontal	Bib-Nose	Oblique	Horizontal	Bib-Nose
Inlet Type	Flange	Flange	Flange	Flange	Flange
	Thread	Thread	Thread	Thread	Thread
Valve Type	Straight	Straight	Angle	" S " Type	" S " Type
Outlet Type	BSS336 or Storz				



| TR-SG1 |



| TR-SG2 |



| TR-SG3 |



| TR-SG4 |



| TR-SG5 |



| TR-SG6 |



| TR-SG7 |



| TR-SG8 |



| TR-SG9 |



| TR-SG10 |

LANDING VALVE

- Gate Valve:

The Gate valves are made of copper alloy material and according to BS5041 Part 2 standard.

The outlet standard of these valves is BS 336 or storz.

Desc.	TR-GT1	TR-GT3	TR-GT5
Model	TR-GT2	TR-GT4	TR-GT6
Stem Type	OS & Y	NRS	RS
Inlet Type	Flange	Flange	Flange
	Thread	Thread	Thread
Outlet Type	BSS336	BSS336	BSS336



| TR-GT1 |



| TR-GT2 |



| TR-GT3 |



| TR-GT4 |



| TR-GT5 |



| TR-GT6 |



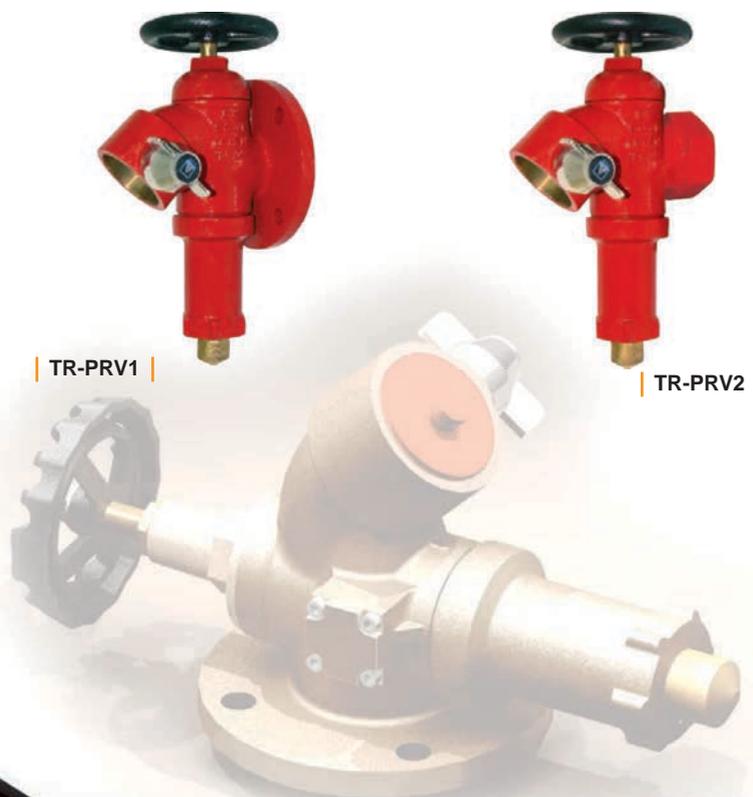
LANDING VALVE

- **Pressure Regulator Valve:**

Because of probable changes of the outlet pressure of the valves that can injure the fire fighter, this type of valve is designed to arrange and fix the outlet pressure of valve (For example 7bar).

These valves can be fitted to any BS 5041 Globe valve.

Desc.	TR-PRV1	TR-PRV2
Model		
Valve Type	Globe	Globe
Inlet Type	Flange 2 ½" , 3"	2 ½" Thread
	# 150 , # 300	# 150
Inlet Pressure	8 – 20 barg	8 – 20 barg
Outlet Pressure	6 – 12 barg	6 – 12 barg



MONITOR

There are various kinds of Monitors are made in IMEN TIAR Engineering company for water and foam services.

Desc.	Model	TR-MW1	TR-MW2	TR-MW3	TR-MW4	TR-MW5	TR-MW6	TR-MW7	TR-MW9
Type		Portable	Fix	Fix	Fix	Fix	Fix	Fix	Portable
Operating System		Single Hand Wheel	Double Hand Wheel	Handel	Chain	Handel	Handel	Handel	Single Hand Wheel
Inlet Size		2 x 2 1/2"	3" , 4"	3" , 4"	4"	3" , 4"	4"	4"	2 x 2 1/2"
Capacity (LPM)		1300-2000	1800-2700	1800-2700	1800-2700	1800-3600	6000	1300-2000	2000-3000



| TR-MW1 |



| TR-MW2 |



| TR-MW3 |



| TR-MW4 |



| TR-MW5 (Water) |



| TR-MW5 (Foam) |



| TR-MW6 |



| TR-MW7 |



| TR-MW9 |



REMOTE CONTROL MONITOR

These type Monitors are designed to stand guard over industrial complexes, refineries, chemical plants, offshore platforms, helidecks and more. It can be activated from a remote location or stand panel where the operator can turn on the water supply; direct the monitor horizontally and vertically; and change the pattern on the nozzle.

ALL FROM A SAFED DISTANCE.

There is even an option that will allow the monitor to oscillate automatically.

Desc.	TR-RCM1,2 (Remote Control Monitor)	TR-OSM (Self-Oscillating Monitor)
Model	(Remote Control Monitor)	(Self-Oscillating Monitor)
Type	Electrical Actuator	Hydraulic Actuator
Inlet Size	Flange 3" or 4"	Flange 3" or 4"
Capacity (LPM)	1800 to 3600	1800 to 3600
Service	Water / Foam	Water



| TR-RCM1 |



| TR-RCM2 |



| Self Oscillating Monitor |



SPECIAL MONITOR

Desc. Model	TR-JM1 (Jet Master Monitor)	TR-WMW5 (Wheeled Monitor)	TR-FMW1 (Foam Water Monitor)	TR-FMW2 (Foam Water Monitor)
Type	Portable	Wheeled	Fix	Fix
Inlet Size	2 x 2 ½"	2 x 2 ½"	Flange 4"	Flange 4"
Capacity (LPM)	1600	2000	1800 to 3600	2700 to 4000
Service	Water / Foam	Water / Foam	Water / Foam	Water / Foam



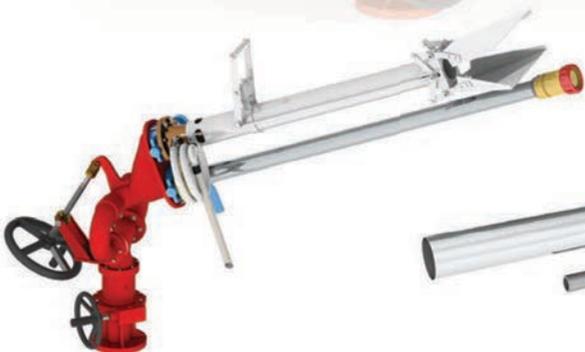
| TR-WMW5 (Foam) |



| TR-WMW5 (Water) |



| TR-JM1 |



| TR-FMW2 |



| TR-FMW1 |





TRAILER MONITOR

IMEN TIAR Trailer with fitted monitors are completely mobile fire fighting units which provide a stable, transportable basis for assignments requiring large volumes of extinguishing agent.

It is possible to use either water or foam agent with these trailers.

Desc.	TR-TM1	TR-TM2	TR-TM4	TR-TM7
Model	TR-TM1	TR-TM2	TR-TM4	TR-TM7
Type	Trailer	Trailer with Tank	Trailer with Tank	Trailer
Inlet Size	4 x 2 1/2"	4 x 2 1/2"	4 x 2 1/2"	4 x 4"
Capacity (LPM)	1800 to 3600	1800 to 3600	1800 to 3600	6000 to 11000
Service	Water / Foam	Water / Foam	Water / Foam	Water / Foam
Foam Tank/ Material	1000Lit / S.S	2000Lit / GRP



TR-TM1
Trailer Monitor



TR-TM2
Trailer Monitor with Foam Tank



TR-TM7
Trailer Monitor



TR-TM4
Trailer Monitor with Foam Tank

FOAM EQUIPMENT

a) Mobile Foam Unit

Desc. / Model	TR-MF-U1	TR-MF-U2	TR-MF-U3
Type	Mobile	Mobile	Mobile
Foam Tank Capacity	120Lit	200Lit	120Lit
Foam Tank Material	GRP	GRP	GRP



| TR-MF-U1 |



| TR-MF-U2 |



| TR-MF-U3 |

b) MFG

A mechanically- produced fire fighting foam consists essentially of water and a stable foaming agent (or foam compound) which together form the continuous phase of the foam and air, that disperse phase. Inline Mechanical Foam Generator is modified version of Inline Inductor. It inducts foam as well as expands it and also transports the foam a long distance.



| MFG |

c) Foam Chamber & Foam Pourer

Designed to deliver foam directly onto the surface of flammable or combustible liquid.

The foam chambers are installed on flammable liquid storage tanks just below the roof joint.

Upon entering the chamber the foam solution is expanded and then discharged against a deflector mounted inside the storage tank. The deflector (or foam pourer) directs the foam against the inside wall of the storage tank.



| Foam Chamber |



| Foam Pourer |



FOAM EQUIPMENT

d) Inline- Inductor

This product is made of Al-Alloy / Gunmetal material and with BS336 or storz Inlet/ Outlet standard. Induction rate of these inline- inductors is 3% and 6%.

Desc. / Model	TR-ILI 225	TR-ILI 450	TR-ILI 900
Capacity	225	450	900

Desc. / Model	TR-IED 225	TR-IED 450
Capacity	225	450



| TR-ILI 450 |



| TR-IED 450 |

e) Foam Nozzle

These nozzles are made of Al-Alloy / Stainless steel material and with BS336 or storz inlet standard.

Desc. / Model	TR-AFN 225	TR-SFN 225	TR-AFN 450	TR-SFN 450	TR-AFN 900	TR-SFN 900
Type 1	Simple	Simple	Simple	Simple	Simple	Simple
Type 2	Self-Inducing	Self-Inducing	Self-Inducing	Self-Inducing	Self-Inducing	Self-Inducing
Capacity	225	225	450	450	900	900
Body Material	Al- Alloy	Stainless steel	Al- Alloy	Stainless steel	Al- Alloy	Stainless steel



| TR-AFN 450 (Simple type) |



| TR-AFN 450 (Self inducing) |



| TR-AFN 450 (Simple) |

IMEN TIAR TR-FNM Nozzles produce medium expansion foam, This is effective for fire fighting applications.

That is lightweight and GRP construction unique features include:

- Low pressure performance (Ideal for use with portable educators)
- High volumes of finished foam.
- Rapid fire or spill coverage.
- Reduced water usage.



| TR-FNM |
Foam Nozzle

FIRE HOSE BOX & HOSE REEL

Desc. Model	HB-W	HR-W
	HB-G	HR-G
Type	Wall	Wall
	Ground	Ground
Size	According to order	According to order
Body Material	Steel / S.S / GRP	Steel / GRP



Fire Hose Box



Fire Hose Box



Fire Extinguisher Box



Fire Hose Reel



First Aid Kit



Fire Hose Reel



Fire Hose Reel



NOZZLE

a) Handel Type

These Nozzles are the Handel type and made of Gunmetal / Aluminum material. They are used for water service.

Desc. / Model	TR-WN-F1	TR-WN-F2	TR-WN-F3	TR-WN-F4
Capacity	900	450	225	100
Operating	Shut off / on Fog – Jet			

b) Pistol Type

These Nozzles are used for water and foam services. The flow rate of this type of nozzle can be arranged.

Desc. / Model	TR-EBK1	TR-EBK2
Capacity	100 to 450	450 to 900
Operating	Shut off / Fog – Jet	Shut off / Fog – Jet



| TR-EBK1 |



| TR-EBK2 |

c) Fix Type

These Nozzles are made of Gunmetal / Aluminum material. They are used for water and foam services in monitor.

Desc. / Model	TR-NM1	TR-NM2	TR-NM3	TR-NM4	TR-NM5
Capacity	2000	2000	1300	3000 / 4000	6000
Operating	Shut off / on Fog – Jet				
Service	Water	Water	Water	Water	Water

Desc. / Model	TR-NFM1800	TR-NFM2000	TR-NFM2700	TR-NFM3600
Capacity	1800	2000	2700	3600
Operating	Jet	Shut off / on Fog – Jet	Jet	Jet
Service	Foam	Water & Foam	Foam	Foam



| TR-NFM 2000 |



| TR-NFM 2700 |



| TR-NM1 |



| TR-NM2 |



| TR-NM3 |



| TR-NM4 |



| TR-NM5 |



| TR-NFM3600 |

FIRE FITTING

The Fire Fittings consist of three groups of coupling, adaptor and cap with various sizes from 1 ½" to 5" .
These products are made of Copper alloy / AL-alloy material and according to BS336, storz or BSRT standard.

a) Coupling



| BS Copling |
Multi Serrated



| BS Coupling |
Rib-Tail



| BS Coupling |
Double action



| STORZ Coupling |



| BS Coupling |
4" BS RT

b) Adaptor



| BS Adaptor |
Male - Thread



| BS Adaptor |
Female-Thread



| BS Adaptor |
Male - Male



| BS Adaptor |
Male - female



| BS Adaptor |
female - female



| BS Adaptor |
Flange-Female



| BS Adaptor |
Flange - BSRT



| Storz Adaptor |



| BS - Storz Adaptor |

c) Cap



| Storz Cap |



| BS Cap |
Female



| BS Cap |
Male



| BS Cap |
BSRT



MISCELLANEOUS

a) Ejector Pump

Desc. Model	TR-EP1 Ejector Pump	TR-ER2 Ejector Pump	TR-TP1 Turbo Ejector Pump
Feeding water type	Fire water / Sea water	Fire water / Sea water	Fire water / Sea water
Inlet type & Size	BS 336 / Storz 2 ½"	Male (BS 336 / Storz) 2 ½"	Male (BS 336 / Storz) 2 ½"
Outlet type & Size	Thread 4"	Female (BS 336 / Storz) 2 ½"	Female (BS 336 / Storz) 2 ½"
Body Material	Al-Alloy	Al-Alloy	Al-Alloy



| TR-EP1 | | TR-EP2 |



| TR-TP1 |

b) Dividing Breaching

This product is used for distributing from one feed line over several hose line with 2 or 3 outlets.



c) Collecting Breaching

Collecting breaching is used for collecting from several feed hose line 2 to 3 inlet over one outlet.



d) Water Curtain

Water curtain is used to make a curtain of water that cools the fire fighter.



e) Pressure Gage

This is used for measure the pressure of middle and end of water line.



f) Hydrant wrench

This is used opening the hydrant & pumper nozzle.



FIRE STATION EQUIPMENT

a) Hose Binder

This product is used for binding the couplings (1" to 4") to the fire hoses.



b) Hose Washer

This product is used for washing the hose without brushing it.

It can be simply connected to a fire hydrant nozzle and guide the water flow to out of the fire hose.



c) Hose Roller

The extremely well designed hose roller is used for rolled the fire hoses without placing stress on your manpower.

This causes the outflow on water from fire hoses.



d) Suction Hose

The Suction Hoses are smooth inside, black ribbed outside in both type end (BSS 336 or Storz)



e) Suction Strainer

Our Suction Strainer is made of tough but light weight (Al Alloy or S.S) Strainer tolerates high water flow.

These suction strainers have a unique coupling according to BSS336 or storz standard for easy use.





SAFETY SHOWER & EYE WASH

This company produces various types of emergency safety shower & eye wash as below:

- Safety Shower & Eye Wash
- Eye Wash
- Portable Eye Wash
- Portable Safety Shower & Eye Wash

Model	Application
TR-ES (General type)	For use in all location for general application.
TR-ES-L (Laboratory rang type)	For use in all laboratories and clean indoor areas.
TR-ES-D (Self- Draining type)	For use outdoor in tropical and cold climates where over heading or freezing of contained water is a problem.
TR-ES-IH (Isolated and heated type)	As self – draining type but with isolated and heated mechanism.
TR-ES-F (Frame type)	For situations where an emergency shower needs to be totally enclosed.
TR-ES-C (Cabinet type)	this type use where a shower needs to be totally enclosed.
TR-ES-CT (Tank cabinet type)	For use when a constant supply of water cannot be guaranteed.
TR-ES-M (Mobile type)	This type use where there is not possibility use fix unit.
TR-ES-P (Portable type)	Portable units for immediate use by industries.

SAFETY SHOWER & EYE WASH



| Safety Shower & Eye Wash |



| Portable Safety Shower & Eye Wash |

| Safety Shower & Eye Wash |



| Eye Wash |



| Portable Eye Wash |



| Eye Wash |



FIRE FIGHTING SYSTEM

A) FOAM SYSTEM

- Fire Fighting Foam Bladder Tank

The bladder tank foam proportioning system is used to induce foam concentrates into water system with variable flows and / or pressure.

It is cylindrical carbon steel pressure vessel containing a flexible polymeric elastomeric Inner bladder which encapsulates the foam concentrate.

This bladder physically separates stored foam concentrate from the water supply.

This water pressure causes the bladder to collapse which then dispenses foam concentrate out through distribution piping and (Ultimately) into the ratio controller (s).



| Bladder Tank |

- Foam Dosing System

ITE Foam dosing system is totally mechanical device for adding foam liquid to fire or seawater line with adjusted ratio.

It is able to add wide range of foams with various density and viscosity to water line with constant adjusted ratio.

Main advantages of this system are:

- 1- ITE foam dosing system operated only by flow of water energy.
- 2- It is not affected by the water flow rate or pressure in the line or foam viscosity variation and always 3- mixing ratio is remaining in set value.
- 4- It will admix all standard foaming and wetting agents.
- 5- It is not affected by the length or layout of the hose.
- 6- ITE foam dosing systems are available in a range of variants, providing admixture rates from 0.1 to 6%.



| Foam Dosing System |

FIRE FIGHTING SYSTEM

B) SYSTEM

- Deluge Valve

Deluge systems are intended to deliver large quantities of water over a large area in a relatively short period of time.

The deluge valve is compact and is provided with a preassembled trim- all of which minimizes the and installation time

makes it simple and easy.

It opens fast, yet smoothly, preventing water hammer.

Size	Type of Operation	Application	Outstanding Features	Material
Threaded 1 ½" ~ 3"	Local Manual	Pressure reducing service	Durability	Carbon Steel
Flanged 2" ~ 12"	Remote Hydraulic	Pressure sustaining service	Maintainability	Ductile Iron
Wafer End 3" ~ 12"	Electrical	Pressure relief service	Reliability	Bronze
	Pneumatic	Pressure control deluge valve	Compatibility	Ni-Al-Bronze
	Combination		Integrity	
			Availability	
			Flexibility	
			Versatility	



- Spray Nozzle

Water Spray Nozzles are designed to spray water directly on to the hazard surface via a series of nozzles with a carefully predetermined spray pattern.

Various types of spray nozzles such as high velocity spray nozzles, medium velocity spray nozzles and water curtain nozzles are fully designed and manufactured by I.T.E in various range of K-Factors and spray angles.

These nozzles are mainly manufactured with brass with or without chrome nickel plated finish and stainless steel.





FIRE FIGHTING SYSTEM

C) TWIN- AGENT SYSTEM

The Twin – Agent attack provides the most effective extinguishing and securing capability know for many flammable liquid fires.

These self- contained systems utilize nitrogen to charge and expel a combination of dry chemical in one vessel (to extinguish the fire) and the premix foam solution in the other (To blanket the flame- free surface) through the twin hose assembly.

Twin agent can be mounted on vehicles, skid mounts or permanent stations.



| Twin- Agent System |

D) POWDER TRAILER EXTINGUISHER

The dry chemical powder fire fighting trailer is a rapid intervention one or two-axle trailer designed for effective fire fighting capabilities in high risk areas such as commercial complexes, industrial plants and large establishments.



| Powder Trailer Extinguisher |

FIRE FIGHTING SYSTEM

E) CLEAN AGENT SYSTEM

The CO₂ suppression system is an engineered system available in three application configurations: Total flooding, local application or hand- hose line.

Gaseous carbon dioxide rapidly suppresses fire by a combination of cooling and oxygen displacement. Discharge duration and agent flow rates are customized for the individual application.

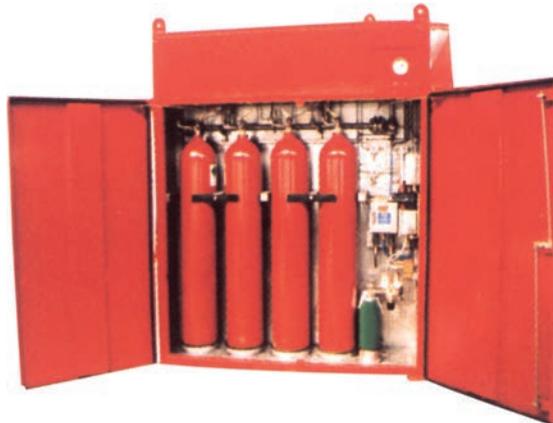
CO₂ extinguishers a fire by reducing the oxygen content of the protected area below the point where it can support combustion.

Carbon dioxide fire extinguishing systems typically store the agent in one of two different ways:

In high pressure cylinders or in low pressure CO₂ tanks.

Carbon dioxide fire extinguishing systems can be used to protect a wide variety of hazards,

From delicate electronic equipment to high- voltage electrical equipment, without danger or damage.





SKIMMER

Skimmer that is capable of recovering a wide range of foams or products floating on the solvent, water or other liquid surface.

It is ideal for calm solvent or liquids perhaps in tanks and separators.

Skimmer can be coupled directly to a vacuum truck or other suction pumps such as diaphragm pumps.

In this mode it may be considered for use in Hazardous areas.

Skimmer is ideal for skimming lighter products like foams or lighter liquid in surface of main liquid in tanks.

Mixture of liquids with different densities (Such as oil and water) Tend to stratify in a storage tank.

A skimmer system is designed to enable the removal of the lighter products that float to the top. I.T.E co. has skimmer system designs that are engineered to operate in conjunction with all types of liquids.

The system can drain the stratified liquid via floaters that enables the drain cone to float over the liquid surface.

The draining liquid will flow through flexible pipes or fixed piping system and swivel joints.

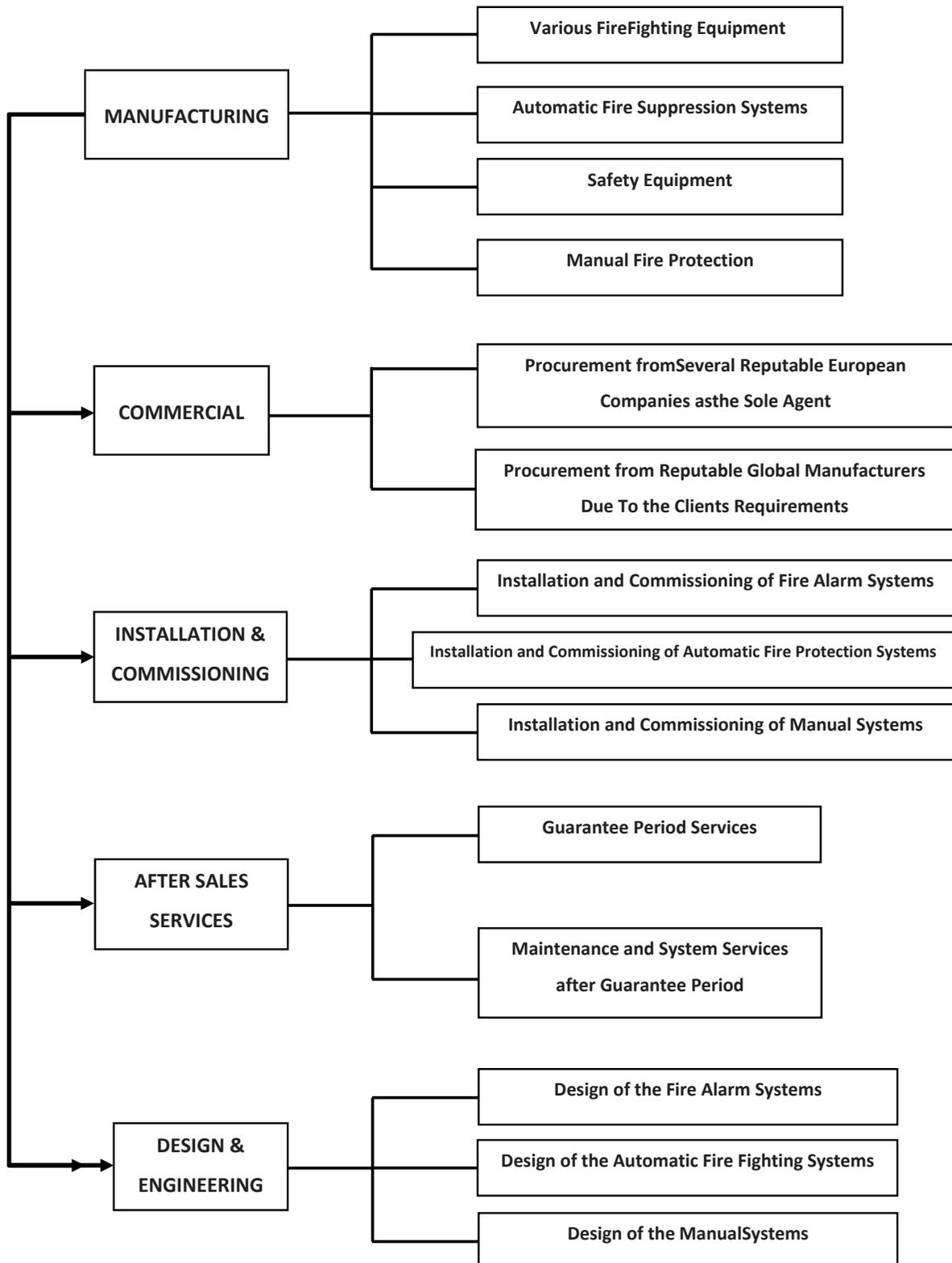
The material of the system including floaters, Piping system and system supports shall be determined according to the liquid of the storage tank in a manner to prevent corrosion.

All required actions from design and engineering stage.

Manufacturing of all parts, commissioning and installation will be fully done by I.T.E co. experts.



IMEN TIAR Engineering Company Services



IMEN TIAR

Engineering Co.

Short Catalouge E

آدرس: تهران، تقاطع بزرگراه جلال آل احمد و چمران، خیابان پروانه، پلاک ۱، طبقه اول
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