



The Safe Day / The Best Day



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IMEN PARS

The **Safe** Day / The **Best** Day



About Us

Imen Pars Company (Imen Pars Company) has represented reliable cooperation and leadership in firefighting industry for three decades. As an expert team in the field of firefighting and fire alarm systems, Imen Pars has been a member of the National Fire Protection Association (NFPA) since 1994, and is also a member of the S.I.P.I.E.M Iranian Oil field Equipment Manufacturers Association. Our areas of activity are Oil and Gas, Petroleum, Petrochemical, Power Plant, industrial factories, and government organization. It is notable that Imen Pars Company is the exclusive representative of the SHILLA FIRE Co. (South Korea) in Iran.

Imen Pars Company has manufactured and supplied wide range of firefighting equipment and systems. Relying on our dedicated engineering team, we have designed and implemented several projects and we are honored that Imen Pars Company has been a highly trusted company approved by numerous vendors and found its way to their lists for the past three decades.

Imen Pars reputation has been earned by focusing on continuous improvement and firefighting industry requirement from the products we manufacture to the after sales services we provide.

Imen Pars Company scope of services is as follows

- Guidance and consultation in all steps of project
- Firefighting Equipment
- Foam Packages
- Water Spray Systems
- Sprinkler Systems
- Firefighting Pump Skids
- Fixed Fire Suppression Systems
- Cabinets & Shelters
- Extinguishers
- Safety Equipments & Safety Sign
- Fire Alarm Systems



Scope of Services

Imen Pars Company products, services and technical supports are available at every point in the project process. As engineering, manufacturing, consultant and instructor group, Imen Pars Company represent the complete selection of fixed and portable fire protection equipment and services to ensure that any client requirement is met and offer the best solutions and qualified products for any fire protection challenge.

Imen Pars Company covers all systems of fire fighting: Water, Foam, Gaseous, Fire alarm, etc.



Departments and Organization

Imen Pars Company is proud of having skilled and expert personnel as a valuable asset. Comprehensive technical knowledge and professional team aspire us to broaden the horizon of innovation and qualification in all firefighting fields. Imen Pars Company team is devoted to cover all commercial and engineering departments:

- Sales and Commercial
- Design and Engineering
- Project Management
- Quality Control Department
- Training and Certification
- Manufacturing and Procurement
- After Sales Services
- Research and Development
- Financial



Products



Firefighting Equipment — Page 1-16



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Safety Equipment — Page 41-42



Fire fighting equipment are designed to extinguish fire or protect users from fire. The fire fighting equipment is generally comprised of hundreds of different type of equipment and technology such as: Install fire fighting systems include hydrants, monitors, valves, hoses, fire boxes, couplings, etc. Extinguishers using water, dry chemical powder, foam, CO2.

Dry Barrel Hydrants

Dry barrel hydrants eliminate damage to the hydrant caused by freezing or corrosion of upper parts in the areas with cold climate.

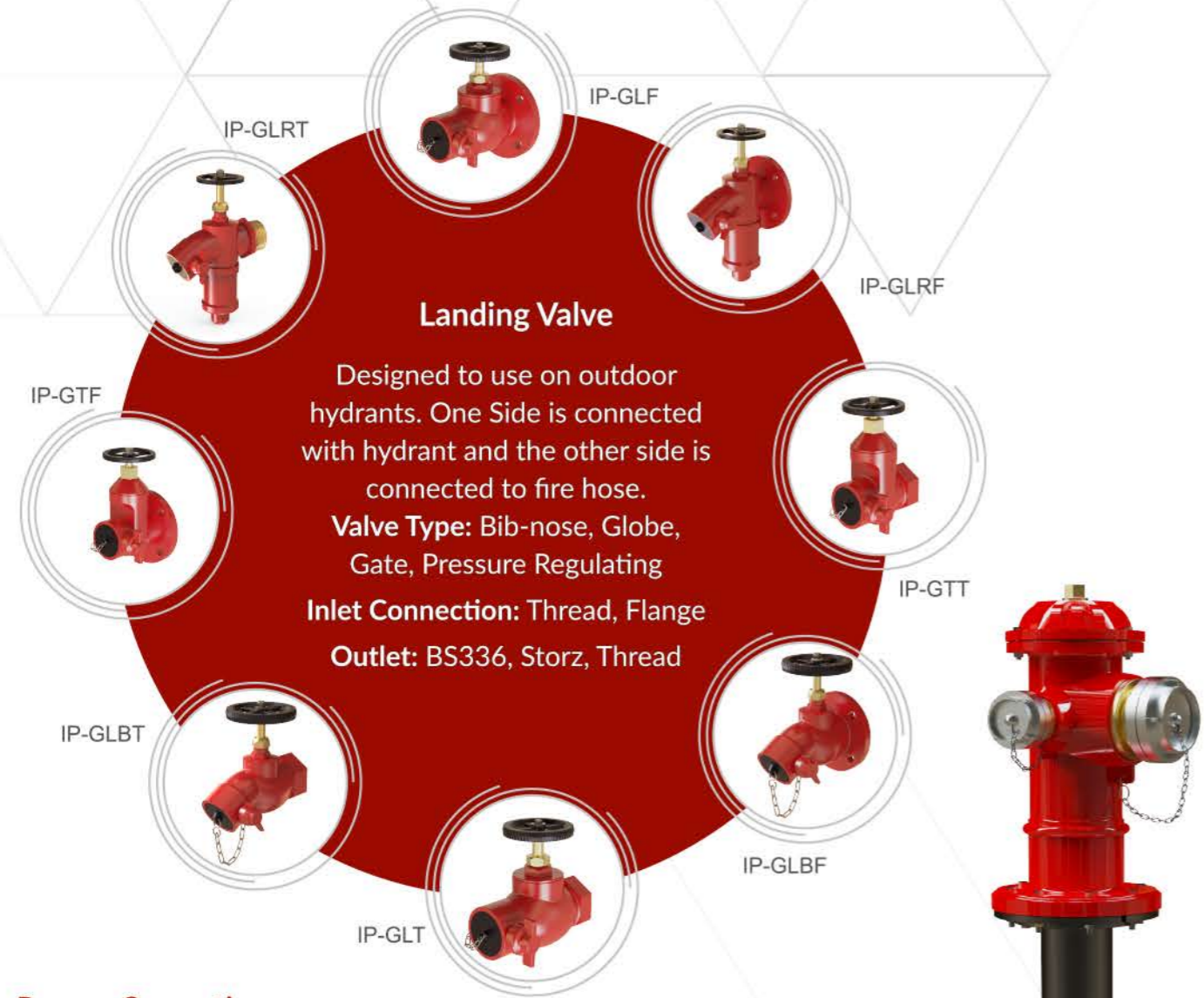
This equipment is manufactured and offered base on client's demand in various kinds:

Inlet Connection Size: 4", 6", 8"

Inlet Connection Rating: #150, #300

Outlet: 4 Way (with Monitor), 3 Way (without Monitor)

Pumper Connection Size: 4", 4.1/2", 5" & 5.1/2"



IP-HD1



IP-HD2

Pumper Connection

The pumper adaptors are generally installed in fire hydrants to facilitate the fireman to draw or pump water into the fire main ring system.

Inlet Connection: Thread, Flange

Outlet: Round Thread, Storz



Monitor Connection

Elbow connection is used on dry hydrants to connect fire monitors to fire line.

Normally an isolation valve, butterfly or ball valve, is used for isolating monitor.

Connection Size: 3", 4"

Connection Rating: #150



IP-26A



IP-23A



IP-23WJ



IP-DGM

Inlet Connection

Inlet connection is two types in fire ring, Imen Pars Company can manufacture straight and elbow type for inlet connections.



Wet Barrel Hydrants

Wet barrel hydrants are popular in regions where freezing of water is not an issue. Its construction is simple and all the mechanical parts are above ground and easily accessible.

Type: 2-Way, 3-Way (with Pumper Connection), 4-Way (with Monitor Connection)

Isolation Valve: Butterfly valve, gate valve, ball valve or globe valve

Body Material: Ductile Iron, Cast Iron, Carbon Steel, AL. Bronze

Inlet Size: 4", 6" & 8"

Connection Type: ASME B16.5/ B16.1, #150, #300

Standard Reference: NFPA 24, AWWA C503



2-Way
IP-HW1



3-Way
IP-HW2



4-Way
IP-HW3



IP-HW4



Water Supply Point

In cases where the standard hydrants do not meet the customer's requirement, Imen Pars Company can produce special equipment to satisfy projects demands.

Underground Hydrant

The Underground Hydrant Valve provides a water delivery point at which the Fire and Rescue Services can connect their hoses in the event of an emergency

Post Plate and Post Indicator Valve

Post valves are designed in large building systems to control an underground water supply to fire protection systems. (Fire water line, automatic sprinkler, water spray deluge, foam-water deluge, or standpipe fire protection systems).

Post Indicator Valves (PIV) models permit operation of underground valves while providing an above ground useful visual indication as to whether the valves are open or shut, in addition to a means for locking the valves in a particular position.

Type: Post indicator Valve (Fixed & Telescopic), Post Plate Valve

Body Material: Ductile Iron, Cast Iron, Carbon Steel, AL. Bronze

Gate Valve Inlet Size: 2"-24" ANSI/DIN

Connection: ASME B16.5/ B16.1 #125, #150, #300

Standard Reference: NFPA 24, API 600



Post Plate Valve
IP-PP



Fixed Post
Indicator Valve
IP-PIV



Telescopic Post
Indicator Valve
IP-PIT





Monitor

Imen Pars Company range of monitors is from manual to hydraulic and even electric and common for many fixed and portable applications.

Imen Pars Company produces and customizes monitors in large variety of models:

Type: Water, Foam, Water/Foam, Double Gun

Body Material: Gunmetal, Brass, Ductile Iron, Cast Iron, Aluminum Alloy, Carbon Steel

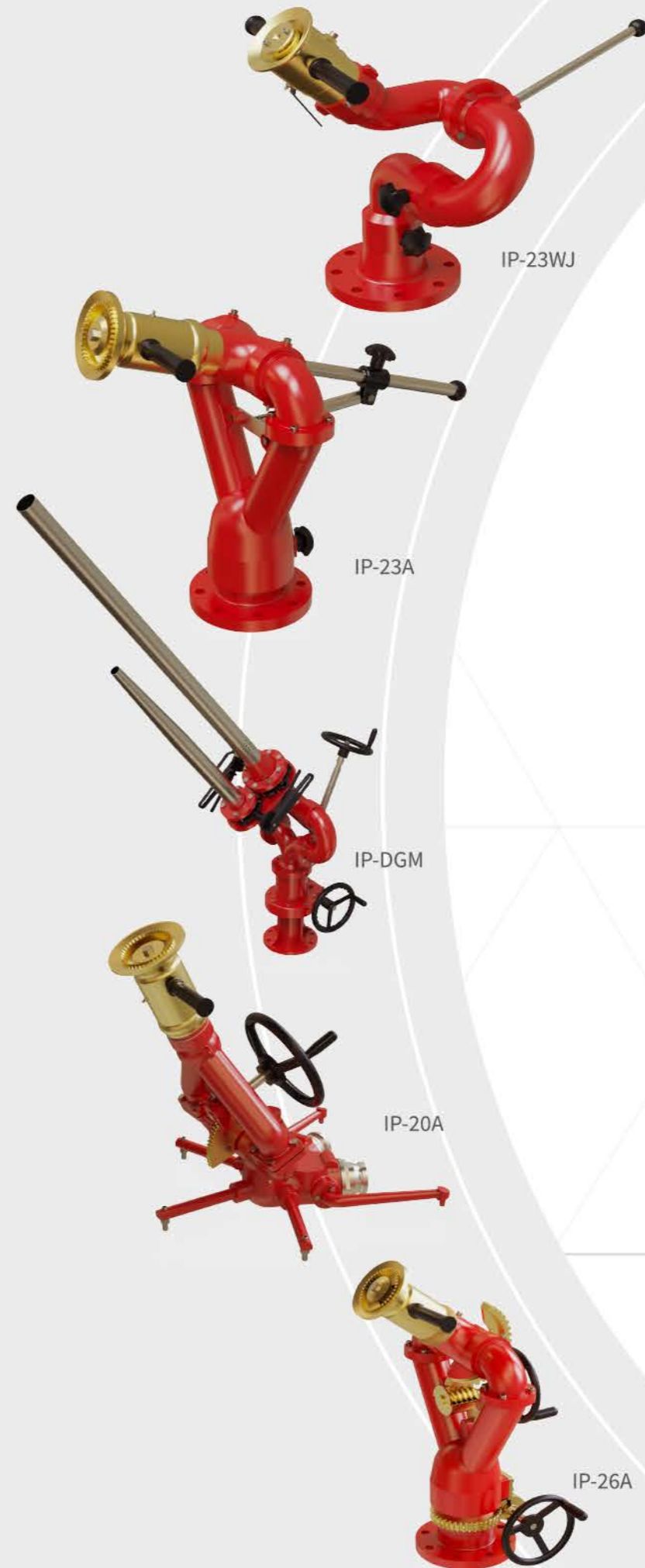
Movement System: Hand Wheel, Hand Lever, Remote Controlled

Flow Rate: 400-4000 LPM

Horizontal Range: Up to 50 m

Standard Reference: NFPA 14, NFPA 25, BS 336

Installation: Fixed, Trolley, Portable



Monitor Nozzles

Designed and engineered for industrial applications and heavy duty use on fixed or portable monitors. Wide flow from 250 to 1000 GPM, and combination fog, straight stream and shut-off itself.



IP-MNF



IP-MNW

Water Nozzles

Imen Pars Company produces standard water nozzles for hose reels and portable usage in large variety of models. Nozzles' throw and flow varies by connection size and orifice size.



IP-LN



IP-FN



IP-PN

Special Nozzles

Imen Pars Company produces different types of customized nozzles based on projects and customers' requirements.



IP-CN



IP-FMN

Fire Box

Imen Pars Company designs and manufactures wide range of Fire Boxes and Shelters compatible with Standard and projects requirements. Imen Pars Company is capable of providing special designs that match to various specifications, sizes and internal contents.

Type: Self-Standing, Wall Mounted

Reference: NFPA 14, NFPA 24, ANSI/ISEA Z308.1

Material: Carbon Steel, Stainless Steel

Accessories: All range of required firefighting equipment.



Fire Hose Box



Fire Hose Reel



First Aid Kit



Extinguisher Shelter



Cabinet





Coupling & Adaptor

Imen Pars supplies all common standard couplings, adaptors and their accessories. In addition to common types of this equipment, Imen Pars is capable of producing and customizing any special order based on client request. Available in different materials like light alloy, brass, Gunmetal, etc.

Fire Department Connection

A Fire department connection (FDC) is designed to allow multiple hose lines to be connected to a one feed line in the other hand in special cases for collecting it in the reverse direction like dividing breaching. They are used to distribute supplemental water into the sprinkler systems and other systems. Back flow is prevented by check valves.
Reference: NFPA 24, BS 336, NFPA 1963
Body Material: Cast Iron, Ductile Iron, Brass, Gunmetal, Aluminum Alloy
Inlet Connection: Flange, Thread, Quick Coupling
Outlet Connection: Quick Coupling (BS 336, Storz)



Fire Department - Flange



Fire Department - Threaded



Dividing Breaching

Fire Extinguishers

A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations. Imen Pars Company represents fire extinguishers in 3 agent types: CO2, Dry Powder, and Water. Our extinguishers cover all range of sizes and weights as required.



Firefighting Hose

A fire hose is a high-pressure hose that carries water or other fire retardant such as foam to a fire to extinguish it.

Reference: NFPA 1963

Material: Rubber, Polyester

Length: 15, 20, 25, 30 m

Connection: BS336, Storz





Water based suppression systems utilize the inexpensive and readily available medium of water to discharge onto flames through a normally fixed piping system. There are 2 main types of Water based Protection Systems, Including: Water spray systems and Sprinkler system.

The hazard / risk to be protected will determine the most suitable type of system you need.

Water Spray Systems

These systems are used where there are typically fast growing and/or high-risk hazards. These types of environments are best suited for the use of a deluge type spray system. A water spray system consists of a fixed piping system, an automatic control valve (deluge valve) and open-head nozzles. When the detection system is activated, typically by detectors, the deluge valve will open and introduce pressurized water into the piping and all nozzles will discharge onto the hazard.

Medium Velocity Water Spray Nozzle

Spray Angle: 140°, 120°, 110°, 100°, 90°, 80°, 65°

K-Factor: 18, 22, 30, 35, 41, 64, 79, 91, 102

Connection Size: 1/2", NPT

Material: Brass, Stainless Steel



Tank Cooling Nozzle

Spray Angle: 150°

K-Factor: 20, 30, 37, 42, 58, 79, 120

Connection Size: 1/2", 3/4" NPT

Material: Brass, Stainless Steel



High Velocity Water Spray Nozzle

Spray Angle: 75°, 80°, 90°, 100°, 115°, 120°

K-Factor: 18, 22, 32, 42

Connection Size: 1/2", 3/4" NPT

Material: Brass, Stainless Steel



Deluge Valves

Imen Pars Company deluge valves are intended to deliver large quantities of water over a large area in a relatively short period of time. Imen Pars deluge Valve is compact, lightweight, and is provided with a preassembled trim - all of which minimize the installation time and make it simple and easy. Imen Pars Valves open fast, yet smoothly, preventing water hammer. Imen Pars valve design prevents false tripping and it can be reset by a thumb-activated knob.

Type: Tubular, Globe

Reference: NFPA 13, NFPA 15, ANSI B16.5, ANSI B16.31

Activation Type: Manual, Electrical, Hydraulic, Pneumatic

Size: 2", 3", 4", 6", 8", 10"

Remote Resetting: Yes

Local Resetting: Once the deluge valve operates (latched is an option)



IP-GDV



IP-TDV

Medium Velocity Water Spray Nozzle

A sprinkler system is fixed fire protection using piping filled with pressurized water supplied from a dependable source. Heat sensitive automatic sprinklers spaced and located in accordance with recognized installation standards are used to detect a fire. When a fire occurs, the heat sensing device (located on the sprinkler head itself) operates (fuses) allowing the flow of water. Upon operation, the sprinklers distribute the water over a specific area to control or extinguish the fire. As the water flows through the system, a flow alarm is initiated to indicate the system is operating. Only the individual sprinklers activated by heat immediately over or adjacent to the fire operate, minimizing water damage. Since the piping system is normally pressurized with water, the system piping temperature should be maintained above 0°C.

Sprinkler Nozzle



Pendant

Upright



Alarm Check Valve



Chamber



Alarm Gong



Foam system is designed as per the class rules and requirement to protect flammable liquid in tanks or the processing areas. The system consists of a bladder tank, a foam closing system, and a foam equipment. Imen Pars Company has designed and implemented several projects with foam systems.



Bladder Tank

IPC bladder tanks are pressure-rated vessels with an internal elastomeric bladder for foam concentrate storage. Upon actuation, the integrated system applies water pressure to the bladder pushing concentrate to the proportioner. The balanced-pressure proportioning system meters the concentrate into the firefighting water line to generate the required foam solution. The solution then flows to the discharge devices protecting the hazard area. Bladder tanks require no external power supply, involve very little maintenance, and are generally more economical than pump proportioning systems.

Type: Horizontal, Vertical

Body Material: Carbon Steel

Movement System: Hand Wheel, Hand Lever

Proportioner Size: 4", 6", 8", 10"

Capacity: 400 to 10,000 lit

Reference: ASME Section VIII, ASME B16.5

Foam Dosing System

IPC produces and supplies all components of foam dosing package. Foam dosing system is provided with a piston pump is particularly suited for use in systems with low flow rates (for example, sprinkler systems) as well as for extinguishing media concentrates with low viscosity such as wetting agents or gear pump particularly suited for use in systems with higher flow rates, such as deluge systems, fire monitors and fire trucks. This type is, in addition, also very suited for high viscosity extinguishing media concentrates. The unit shall be placed in such a manner that the media concentrate has a free flow and flows down from the tank to the dosing pump. Imen Pars perform design, arrange and manufacturing of foam dosing skids based on customer requirements.

Type: Piston Pump, Gear Pump, Portable

Tank Capacity: Up to 10,000 lit

Water Motor Material: Aluminum, AISI 316 (fasteners), PET (vanes), NBR (O-rings).

Dosing pump: Aluminum, brass, ceramics, NBR, AISI 316 (fasteners)

Piping and Fittings Material: Carbon Steel for Water, Steel for Foam

Installation: Horizontal on Skid

Reference: NFPA 11, NFPA 16

Nominal dosing rate: 3%

Water Flow Rate: 450 to 3200 LPM



Foam Equipment
Air Foam Pourer

Foam pourer is designed to discharge fully aspirated foam directly to the annular seal area of the open top floating roof storage tanks for fire or vapor suppression. Fully aspirated foam provides the most effective performance for all types of foam concentrates.

Reference: NFPA11, IPS-E-SF-140
 Inlet Connection: Flange, ANSI B16.5, #150
 Connection Size: 2", 3", 4"
 Material: Carbon Steel, Stainless Steel



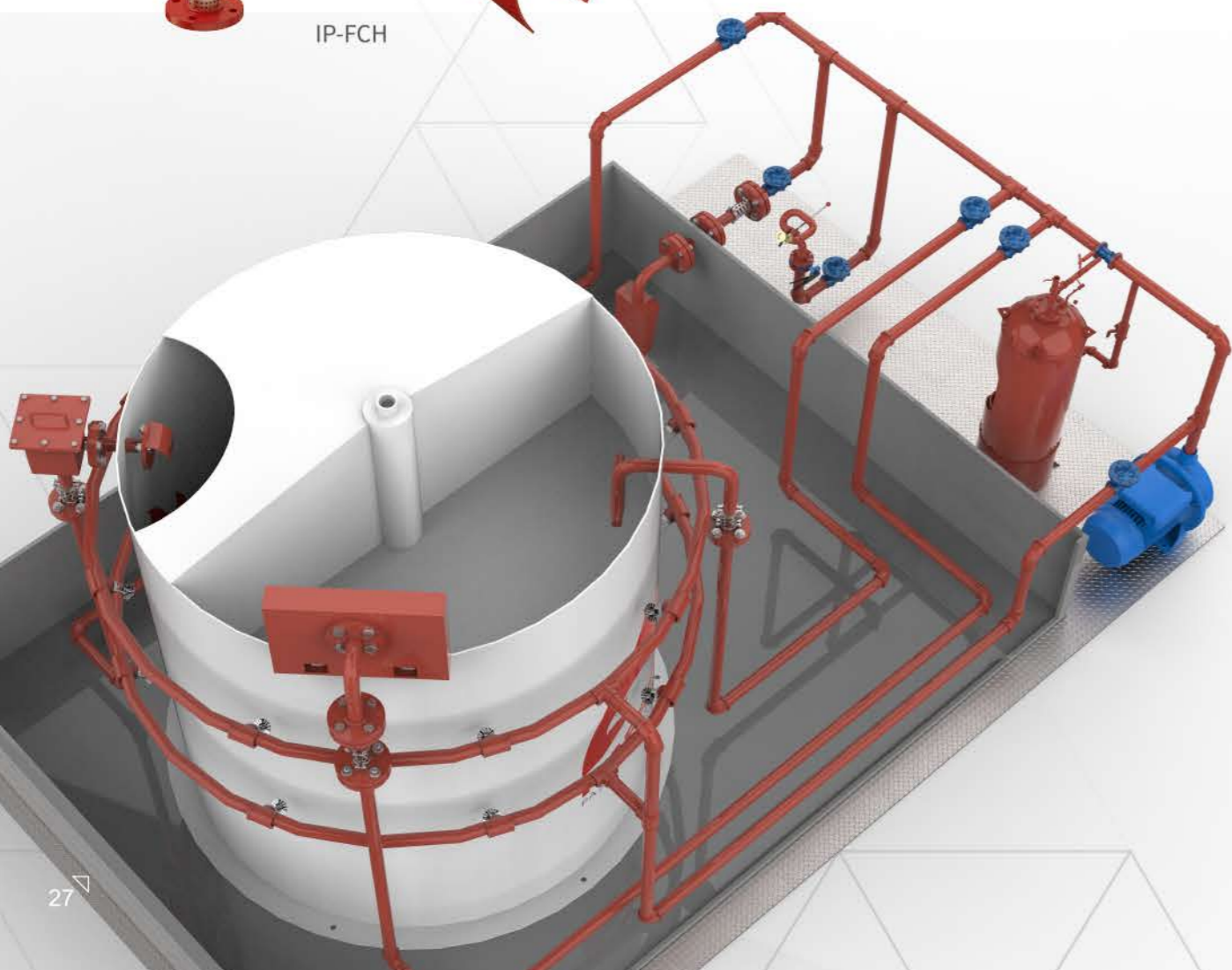
Foam Chamber

Foam Chamber is designed to discharge expanded foam directly onto the surface of a flammable or combustible liquid for fire extinguishment. Foam Chamber is used in one of the most common applications to protect vertical fixed roof (cone) liquid storage tanks, with or without internal floating roof with the low expansion foam system.

Reference: NFPA11, IPS-E-SF-140
 Inlet Connection: Flange, ANSI B16.5, #150
 Inlet Connection Size: 2.1/2", 3", 4", 6"
 Outlet Connection Size: 4", 6", 8"
 Material: Carbon Steel, Stainless Steel



IP-FCH



High Back Pressure

High Back Pressure Foam Generator is used in subsurface foam injection systems, which are primarily designed for the protection of fixed roof storage tanks containing hydrocarbon fuels. The high back-pressure foam maker is capable of generating expanded foam within the optimum expansion ratio range of 2:1 to 4:1 for subsurface injection. The foam maker can discharge against a back pressure as high as 40% of the operating inlet pressure.

Reference: NFPA11, IPS-E-SF-140
 Inlet Connection: Flange, ANSI B16.5, #150
 Inlet Connection Size: 2.1/2", 3", 4", 6"
 Outlet Connection Size: 4", 6", 8"
 Material: Carbon Steel, Stainless Steel



Inline Foam Inductor

Inline Foam Inductor is used to induct the foam liquid concentrate in water stream to supply proportioned solution of the liquid concentrate and water, to the foam producing equipment. The inductors are designed primarily for use in the fixed foam installation to provide a simple and reliable method of proportioning in constant flow applications.

Reference: NFPA11, IPS-E-SF-140
 Body Material: Aluminum
 Connection: BS336, Storz, Thread
 Capacity: 400-900 LPM
 Induction: 3-6%



Mobile Foam Unit

Mobile foam unit is a fully self-contained unit, which has been developed for the rapid deployment of foam extinguishing system to fires in high-risk places such as loading terminals, oil storage areas, boiler rooms, engine compartments, and areas susceptible to chemical spills. This equipment is ergonomically designed, it requires minimum effort for maneuvering and is perfect mobile foam cart for the purpose of effective fire-fighting

Tank Material: Fiber Glass
 Tank Capacity: 120, 160, 200 lit
 Inductor: Aluminum, 450 lpm
 Hose: Optional
 Branch Pipe: Aluminum, Stainless Steel



Gaseous Suppression Systems



Gaseous fire suppression systems work by releasing a gas or mixture of gases into the air, generally with the aim of reducing the amount of oxygen in the air that feeds the flames. The clean agent cylinders are often stored a distance away from the area it will be protecting. A network of pipes connected to nozzles are spaced by professionals throughout each potential fire location.

Imen Pars Company designs these systems with several types of software to calculate hydraulics, pipe lines modeling, and material take off.

Type: Carbon Dioxide, Inert GAS, HFC227

Reference: NFPA 12, NFPA 2001

Material and Features: According to the client/design requirements.



CO2 Fixed Firefighting System

CO2 is a colorless, odorless, and chemically inert gas that is both readily available and electrically non-conductive. It extinguishes fire primarily by lowering the level of oxygen that supports combustion in a protected area. This mechanism of fire suppression makes CO2 suppression systems highly effective, requiring minimal clean-up, but should be used in normally unoccupied hazard locations or otherwise avoided by personnel when discharged.

Advantages

Carbon Dioxide is clean and leaves no residue. Carbon Dioxide is safe for use on fires involving energized electrical equipment. Carbon Dioxide is effective on fires in locations such as semi-sealed enclosures, which cannot be readily penetrated by non-gaseous extinguishants. Carbon Dioxide is the preferred extinguishant in electronic environments. Versatile, local application and total flooding

Application

- Printing presses
- Spray booths
- Solar thermal plants
- Transformers
- Turbines
- Electric generators
- Power generators
- Storage of flammable liquids

INERT-GAS Fixed Firefighting Systems

INERT-GAS clean agent systems are made up of gases found in the atmosphere and are therefore completely environmentally friendly. They work by completely flooding the room, reducing the oxygen content necessary for combustion, but at the same time ensuring adequate oxygen concentrations for use in occupied areas.

Advantages

- Readily available 'green' gases
- Low cost to fill and refill
- Cylinder banks can be stored considerable distances from the protected risk
- No fogging or visibility issues in the protected area
- No fog and no loss of post-discharge visibility
- Zero Ozone Depletion Potential (ODP)
- Electrically non – conductive
- Stored as a gas
- Non corrosive/toxic
- Easy to obtain anywhere in the world
- No evacuation issues
- No global warming impacts
- Only agent approved for automatic use in manned environments

Application

- Computer rooms, control rooms.
- Electrical panels, telephone switchboard equipment.
- Electric and electronic applications.
- False floors and false ceilings.
- Archives, museums, and libraries.



Main Cylinder





HFC227 Fixed Firefighting Systems

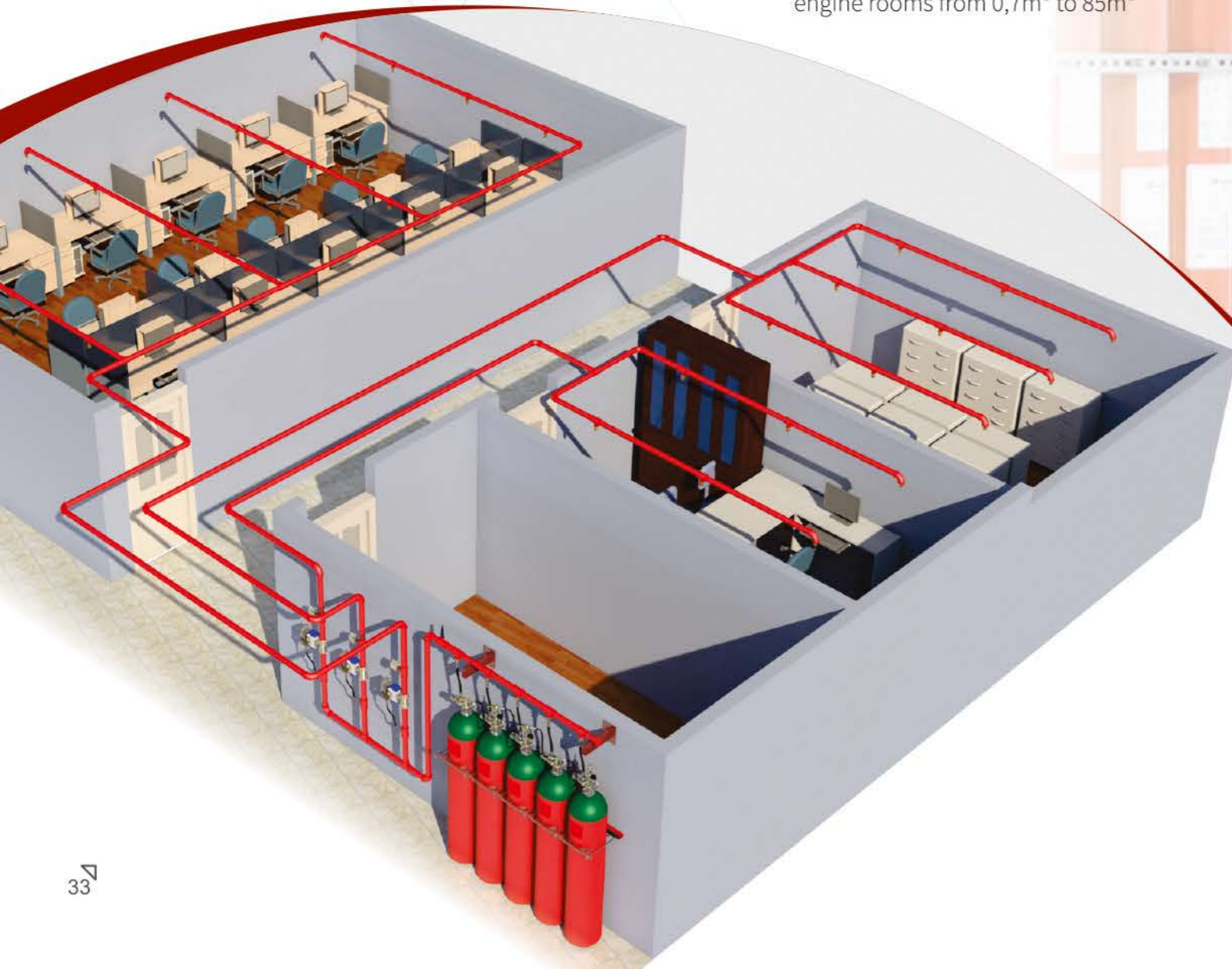
The HFC227 clean agent systems offer the highest efficiency for the most diverse hazard areas. All components, from the cylinder banks to the nozzles, are developed to the highest quality assurance standards. Halocarbon gases works by total flooding, with discharges occurring within a few seconds. It functions primarily through the instantaneous decrease in temperature of the protected room. The drastic removal of heat causes radical fire suppression.

Advantages

- Fast & effective (10 seconds for last smothering of the fire)
- No significant reduction in oxygen levels
- Clean gaseous agent leaving no residue
- Zero ozone depleting potential
- Low global warming potential
- Short atmospheric life span
- Electronically non-conductive
- Safe for use in fully occupied areas
- Minimal storage requirement
- Versatile range of containers, nozzle and ancillaries
- Extensively tested, recognized and approved worldwide
- Effective on-site installation

Application

- Museums and art galleries
- Telecommunication systems
- Hospitals
- Petrochemical facilities
- Computer Rooms Archives and libraries
- Laboratories
- Electrical cabinets and substations
- Control Rooms
- Marine hazards
- Servers (DPCs)
- False floors and ceilings.
- Protection for small boats up to large yachts and platforms with engine rooms from 0,7m³ to 85m³





The primary purpose of a fire indicator panel is to monitor each circuit, zone or point for any condition (alarm signal or other abnormal condition); display the status of that condition and to operate any required output or outputs according to the approved design of the system. These outputs are typically for the purpose of warning occupants on a fire alarm signal, notify the fire brigade, control the spread of heat, smoke or fire or used for a wide variety of other purposes. There are generally two types of fire alarm systems:
Conventional System
Addressable System



Fire Alarm Control Panel

A fire alarm control Panel is probably best described as the brain of a fire detection and alarm system. A fire indicator panel comprises control and indicating equipment that combined together form an integrated system.

IMEN PARS supplies the clients with Fire Alarm Control Panels from reputed manufacturers such as Kentec, C-TEC, Notifier, Hochiki manufacturer.

Detectors

A fire detection system uses a smoke detector to detect a fire before it actually starts. An effective fire detection system eliminates damage by ensuring that a fire can be prevented before it even starts. A fire detector may also have a direct connection to an alarm monitoring center.

Different premises have different protection requirements. The preferred detection device is the smoke detector. In premises not suitable for a smoke detector, such as kitchens, a heat detector is used. Hybrid detectors, which combine smoke, heat and CO detection, can be used in premises where vehicles are kept.

Fire alarm specialty equipment, such as sampling systems, fiber-optic systems, digital linear heat detection cable, flame detectors and optical beam smoke detectors, can be used in premises not suitable for ordinary fire detectors.

Fire and Gas Detection System

F&G detection systems are deployed to continuously monitor plant activity and in case of hazardous conditions initiate appropriate actions. These systems need to work from the detection of hazardous gases up to a proper plant shutdown. These systems are critical to plant safety and their efficiency and reliability is of utmost concern not only to plant operators but also to environmental & business insurance authorities. These systems require a high level of expertise and detailed design and integration to perform effectively. Imen Pars Company can provide fire and gas systems that monitor conditions and collect data e.g. flame detector, combustible gas detector, toxic gas detector, smoke, temperature, rate of rise, and provide the facility to collate this data.

Imen Pars Company is highly experienced in implementing F&G systems using client Cause and Effect diagrams.

Imen Pars Company provides a complete design of F&G systems for onshore and offshore applications based on PLC or EN 54 control panels. The system architecture is designed with SIL certified panels, detectors and actuators in order to grant the desired integrity level of each safety function.

The trip function is correlated with other superior systems such as the ESD or DCS and it is used to transfer the confirmation that certain hazardous conditions have been detected.



Imen Pars Company provides all range of detectors and devices as follows:

- Fire Alarm Control Panel
- Modular F&G Control Panel
- Flammable and Toxic Gas Detector
- IR3, combined UV/IR, single UV types, single IR type Flame Detector
- Audible and Visual Alarm Device
- Optical Smoke Detector
- Ionization Smoke Detector
- Linear Heat Detector
- Air Sampling Smoke Detector
- Beam Detector
- Manual Alarm Push Button



Gas Detector



Audible and Visual Alarm Device



Manual Alarm Push Button



Flame Detector



Fire Alarm Device



Safety Equipment



Safety Shower & Eyewash

Emergency showers and eyewash stations provide on-the-spot decontamination (after exposure to a hazardous substance, especially a corrosive substance, are critical). They help workers to flush away hazardous substances that can cause injury.

Type: Safety Shower & Eyewash, Eyewash

Standard Reference: ANSI/ISEA Z358.1

Installation: Self-Standing, Portable

Body Material: Stainless steel, HDG Carbon Steel

Operation Mechanism: Foot Panel, Hand Lever

Accessories: Eye Wash Nozzle, Pressure Regulator, Shower, Strainer, Bowl, Drain Valve

Option: Flow Switch, Lighting, Safety Sign



Safety Covering Equipment

Imen Pars Company is a reliable provider of fire safety equipment for the protection of personnel working in hazardous environments including the chemical processing plants, energy industries and so on.



Safety Boots



Firefighting Helmet



Safety Glasses



Breathing Apparatus



Safety Gloves



Ear Plugs



Fireman Clothes



Portable Gas Detector

Safety Sign

