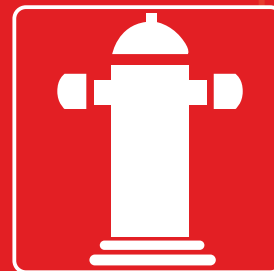
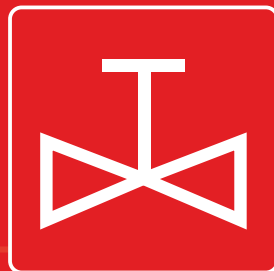


NORM[®]
TEKNIK
Fire Protection Systems

FIREFIGHTING & SAFETY CATALOG



**NORM TEKNİK MALZEME
TİCARET İNŞAAT SANAYİ LTD. ŞTİ.**

Eyüp Sultan Mah. Ulubatlı Hasan Cad.

Başkent Sk. No:6 34885

Samandıra - Sancaktepe / İSTANBUL

Tel:+90 216 311 40 41 pbx Fax:+90 216 311 90 91

e-mail: norm@normteknik.com.tr

ANKARA OFFICE

A.Öveçler 2. Cadde (1065 Cadde)

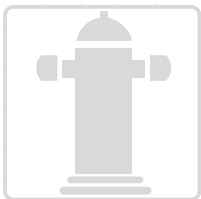
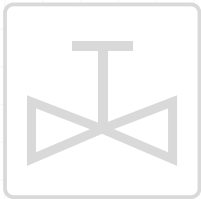
No: 29/1 065620 Çankaya/ANKARA

Tel:+90 312 472 78 88 pbx Fax:+90 312 472 78 89

e-mail: ankara@normteknik.com.tr

www.normteknik.com.tr

Norm Teknik reserves the right under its product improvement policy to change design details and furnish equipment when so altered with reference some of the items in this catalog. These "Non Manufactured" products are sold subject to the manufacturers specifications, representations and warranties. Norm Teknik assumes no responsibility for the accuracy of such manufacturers statements. It is the sole responsibility and duty of the purchaser to determine that a particular product is suitable for the usage anticipated, and complies with all applicable regulations, standards, and statutes governing such usage.



INTRODUCTION

NORM TEKNİK is one of the top EPC contractor for fire fighting & safety equipments and HVAC products in Turkey and we have taken our expertise & experience into the worldwide market to establish a reputation for excellence and customer support.

Our approach to each project from different technical angles ensures extensive and complete solution. We are dedicated to make certain the success of the projects.

We have never left working with best companies in their field to reduce the fire risk to minimum in living spaces and industrial areas. All the goods and services we offer to our clients certified by internationally recognized certification bodies.

We are committed to deliver high quality goods and services which fully meets our customers' needs for quality assurance together with ISO 9001:2008 requirements and we constantly seek ways to improve our quality continuously and ensure its continuity. For each undertaken project, we design a unique quality management system and make sure this system responds to the requirements of the projects from start to finish.

Outstanding business performance requires outstanding HSE performance. The health and wellbeing of our employees, our key asset, will always come first. We also ensure that all of our operations are carried out in a manner that protects the environment and community in general.

We are confident that you will find our presentation of interest and assure you of our competence and desire to realize your contract in away totally satisfactory to you.

OUR VISION

The population of the world is rapidly growing and so that our common life spaces are growing too. It is getting more important to prevent these common spaces from one of the biggest disasters, fire.

In the period since our foundation of 1997, we have tried to reflect specializing and did the best in all our projects as a result of globalism.

It is always our aim to catch the latest technology and information to our country with our dynamic staff. We have never left working with Specialist Engineers and qualified staff in our technical and commercial applications to reduce the fire risk to minimum in living spaces and industrial areas. We work understanding of combination of the cooperation with the world's most famous Fire Prevention companies and our manufacturing opportunities.

Our main aim is to give better service, manufacture more qualified and various products with our Research & Development mentality which is the essential need for understanding of modern management and production. We are willing to improve the understanding of Fire Security to the level of developed countries.

In this way; our method is to develop our country by using the raw material, productive power and information of our country to our projects and manufacturing.

Who We Are

Norm Teknik delivers solutions for all types of fire protection systems including sprinkler, foam, gas and water mist, firefighting & safety equipments and high integrity HVAC products.

Our Customers

Norm Teknik offers engineering, procurement and construction solutions to enterprises of any size.

Our Quality

Working in close partnership with top manufacturers all over the world, we offer high quality, cost-effective and tailor made solutions to our customer's needs.

Norm Teknik Facts & Figures

Year of Establishment: 1997

Headquarters: Sancaktepe, Istanbul/Turkey

- 40 engineers
- 30 technicians
- 32 white collar employees
- 35 blue collar employees

2011 Norm Teknik Group Net Sales: 31.4 m \$

Norm Teknik Group

Company	Field of Activity	Foundation Year
Norm Teknik	EPC Company	1997
Normeks	Manufacturer	1999
NP Teknik	Foreign Trade Company	2007

Fields of Activity

We strive to be the most suitable business partner for our customers through offering them with a wide range of products and services in the field of fire protection.

- Fire Protection Systems
- Firefighting & Safety Equipments
- Marine Safety
- High Integrity HVAC Dampers

Our Services

Our clients can be confident that our expertise build up over 15 years, approach to each project with same seriousness and strong relations with our partners will ensure that their projects will be delivered on time and to budget.

- Consultancy
- Engineering
- Procurement
- Construction

Consultancy

Our professionals have an extensive understanding of building and fire codes. We work hand-in-hand with our clients to provide fully integrated, seamless solutions that ensure the highest level of protection and safety for their occupants and property.

Our engineers identifies the risk class of the constructions to form Fire scenario, appropriate system choice and Fire Prevention in accordance with NFPA standards and European Norms.

Engineering

Engineering services include design and hydraulic calculations of gaseous, sprinkler, foam and water based extinguishing systems, the development of fire protection system design drawings and specifications plus product selection.

At Norm Teknik, our engineers are specifically trained and educated to address fire safety issues, project needs and client concerns as they relate to fire protection, firefighting & safety and can be called upon at any point in a project's development.

To Protect Our Clients We Use

- Omnicadd® for foam and water based systems,
- Coosa® for CO₂ gaseous suppressions systems,
- Fire Net Web® for clean agent fire extinguishing systems,
- LPG FM-200® and LPG 3.51® for UL Listed and FM Approved clean agent fire extinguishing systems,
- Autodesk Autocad® for drawings.

Procurement

Through longstanding global alliances and networks, Norm Teknik is able to efficiently source anything our clients require - anywhere - from highly trusted sources.

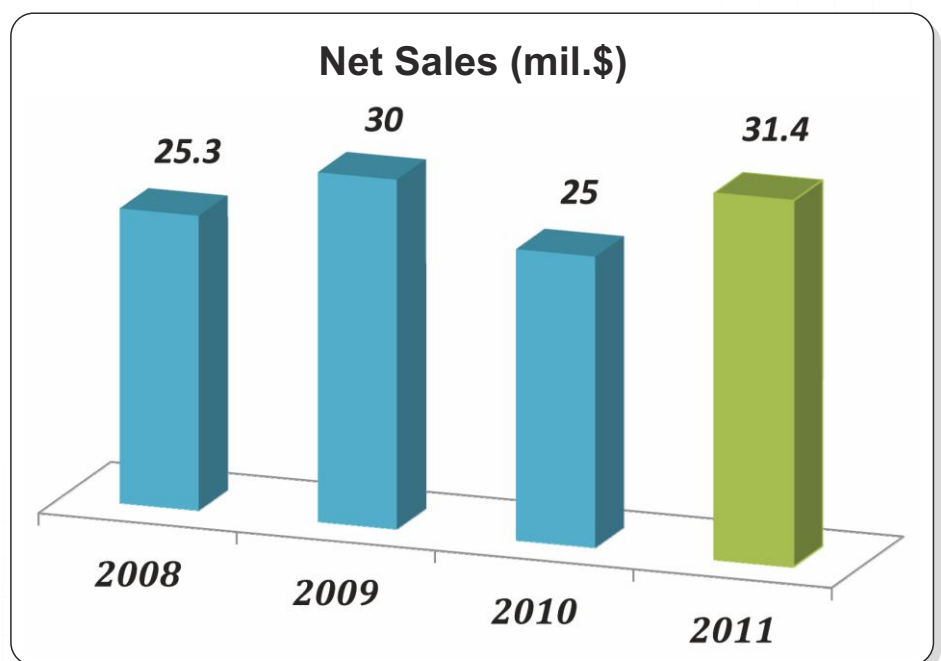
Our partnerships allow us to achieve the ideal purchase: targeting value, product quality, and an optimal logistics solution to save time and money.

Construction

Norm Teknik has the capability to construct all types of fire protection, firefighting and safety systems.

All construction works are undertaken by team of professionals ensuring reduced project risk, delivered to a high standard of quality, on time and at agreed budget.

Financial Performance of Norm Teknik Group



INDEX

PAGE

1. FIRE PROTECTION SYSTEMS	7
1.1. FOAM BASED FIRE EXTINGUISHING SYSTEM	7
1.1.1. FOAM-WATER SPRINKLER SYSTEM	7
1.1.2. FOAM-WATER DELUGE SYSTEM	8
1.1.3. FOAM-WATER DRY PIPE SYSTEM	8
1.1.4. FOAM-WATER PREACTION SYSTEM	8
1.2. CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	9
1.2.1. FM-200® GAS BASED FIRE EXTINGUISHING SYSTEM	9
1.2.2. NAF 125 (HFC 125) GAS BASED FIRE EXTINGUISHING SYSTEM	10
1.2.3. INERT GAS (ARGON IGO1) FIRE SUPPRESSION SYSTEM	10
1.3. CO ₂ GASEOUS SUPPRESSION SYSTEM	10
1.4. WATER MIST SYSTEM	11
1.5. SPRINKLER SYSTEM	11
1.5.1. WET SPRINKLER SYSTEM	11
1.5.2. DRY SPRINKLER SYSTEM	12
1.5.3. PRE-ACTION SPRINKLER SYSTEM	12
1.5.4. DELUGE SPRINKLER SYSTEM	12
1.6. KITCHEN WET CHEMICAL SYSTEM	13
1.7. DRY CHEMICAL FIRE SUPPRESSION SYSTEM	13
1.8. FIRE PUMPS	14
2. FIREFIGHTING EQUIPMENT	15
2.1. FIRE CABINETS	15
2.1.1. SURFACE MOUNTED CABINET	15
2.1.2. RECESSED CABINET	16
2.1.3. OUTDOOR CABINET	17
2.2. FIRE EXTINGUISHERS	17
2.2.1. WATER FIRE EXTINGUISHERS	17
2.2.2. FOAM FIRE EXTINGUISHERS	17
2.2.3. POWDER FIRE EXTINGUISHER	18
2.2.4. CARBON DIOXIDE EXTINGUISHER	18
2.2.5. MOBILE TROLLEY UNITS	18
2.2.6. STAINLESS STEEL FIRE EXTINGUISHERS	18
2.3. FIRE HOSES	19
2.3.1. SYNTEX 500	19
2.3.2. SYNTEX UNIDUR	20
2.3.3. SYNTEX SIGNAL	21
2.4. NOZZLES	22
2.4.1. SPRAY NOZZLE	22
2.4.2. CELLAR NOZZLE ROTATING	22
2.4.3. JET-SPRAY NOZZLES	22
2.4.4. AUTOMATIC NOZZLES	22
2.4.5. BRANCH PIPES	22
2.4.6. NOZZLE TIPS	22
2.4.7. TERRACED NOZZLE TIPS	22
2.4.8. FOAM NOZZLES	22
2.5. SPRINKLER	23
2.6. VALVES	23
2.6.1. ALARM CHECK VALVE	23
2.6.2. GATE VALVE	23
2.6.3. GLOBE VALVE	24
2.6.4. SWING CHECK VALVE	24
2.6.5. WAFER CHECK VALVE	24
2.6.6. OS&Y VALVE	24
2.6.7. BUTTERFLY VALVE	25
2.6.8. BALL VALVE	25
2.6.9. PRESSURE RELIEF VALVE	25
2.6.10. PRESSURE REDUCING VALVE	25
2.7. MONITORS	26
2.7.1. MANUAL MONITORS	26
2.7.2. WATER-POWERED OSCILLATING MONITORS	27
2.8. MISCELLANEOUS	27
2.8.1. COUPLINGS	27
2.8.2. WATER MOTOR ALARM	28
2.8.3. PRESSURE SWITCH	28
2.8.4. VANE TYPE WATERFLOW ALARM SWITCH WITH RETARD	28
2.8.5. FLOWMETER	28
2.9. SMOKE & HEAT DETECTORS & SIRENS	29
2.9.1. SMOKE DETECTOR	29
2.9.2. HEAT DETECTOR	29
2.9.3. SIRENS	29
2.10. FIRE TRUCK	29

3. SAFETY PRODUCTS	30
3.1. EYE & FACE	30
3.1.1. EYEWEAR	30
3.1.2. FACE SHIELD	30
3.1.3. GOGGLE	30
3.2. HEARING	30
3.2.1. EARMUFF	30
3.2.2. EARPLUG	31
3.3. RESPIRATORING	31
3.3.1. SELF CONTAINED BREATHING APPARATUS	31
3.3.2. ESCAPE SOLUTIONS	33
3.3.3. TALLY BOARD	33
3.3.4. COMPRESSED AIR CYLINDER	33
3.3.5. FRESH AIR-SUPPLY SYSTEM	34
3.3.6. REUSABLE RESPIRATORS	34
3.4. INSTRUMENTATION	35
3.4.1. PORTABLE GAS DETECTOR	35
3.5. FALL PROTECTION	35
3.5.1. HARNESSES	35
3.5.2. FALL ARREST DEVICE	35
3.5.3. LANDYARD & WORK POSITION ROPE	35
3.5.4. ROPE	36
3.5.5. DESCENDER & RESCUE DEVICE	36
3.5.6. AUTOMATIC FALL ARREST BLOCKS	36
3.6. HYDRAULIC RESCUE DEVICE	36
3.6.1. CUTTERS	36
3.6.2. SPREADER	37
3.6.3. COMBINATION TOOL	37
3.6.4. RESCUE RAMS	37
3.6.5. PULLING CHAIN	37
3.6.6. MISCELLANEOUS POWER UNITS	38
3.7. GLOVES	38
3.7.1. CHEMICAL	38
3.8. PROTECTING CLOTHING	39
3.8.1. REUSABLE TECHNICAL WORKWEAR	39
3.8.2. SINGLE USE CLOTHING	40
3.8.3. WORKWEAR	41
4. MARINE SAFETY	42
4.1. LIFE SAVING APPLIANCES	42
4.1.1. SURVIVAL SUIT	42
4.1.2. THERMAL PROTECTIVE AID	42
4.1.3. LIFEBOUY	42
4.1.4. BUOYANT CUSHION	42
4.1.5. LIFE JACKET	43
4.1.6. MOB - LIGHT - SMOKE - SIGNALS	43
4.1.7. HELICOPTER RESCUE BASKET	43
4.2. HELICOPTER RESCUE EQUIPMENT	43
4.2.1. RESCUE EQUIPMENT FOR HELICOPTER DECK	43
4.3. LIFERAFTS	44
4.4. OIL SPILL KIT	44
4.5. COMMUNICATION	44
4.5.1. HAND HELD MARINE RADIO	44
4.5.2. RADAR TRANSPORDER	44
4.6. EMERGENCY & SAFETY LIGHTS, SIGNALS	45
4.7. RESCUE BOATS	45
4.8. DECK EQUIPMENT	45
4.8.1. EMBARKATION LADDER	45
4.8.2. PILOT LADDER	45
4.8.3. GANGWAY NET	45
5. HIGH INTEGRITY HVAC PRODUCTS	46
5.1. FIRE DAMPER	46
5.2. FIRE AND GAS DAMPER	46
5.3. FIRE AND SMOKE DAMPER	46
5.4. ISOLATION DAMPER	47
5.5. VOLUME CONTROL AND MODULATING DAMPER	47
5.6. NON-RETURN/PRESSURE RELIEF DAMPER	47
5.7. BLAST DAMPERS	48
5.8. WEATHER, RAIN & SAND LOUVERS	48
5.9. CHEMICAL FILTER	48
REFERENCES	50

SGS

Certificate TR10/0010

The management system of

NORM TEKNİK MALZEME TİCARET İNŞAAT SANAYİ LTD. ŞTİ.

Eyüp Sultan Mahallesi Ulubatı Hasan Cd. Başkent Sokak No:6,
Samandıra , Sancaktepe,
İstanbul, Turkey

has been assessed and certified as meeting the requirements of

ISO 9001:2008

For the following activities

**Project, material supply, installation, consulting, supervision,
commissioning, maintenance and service of fire protection systems.**

Further clarifications regarding the scope of this certificate and the applicability of
ISO 9001:2008 requirements may be obtained by consulting the organisation

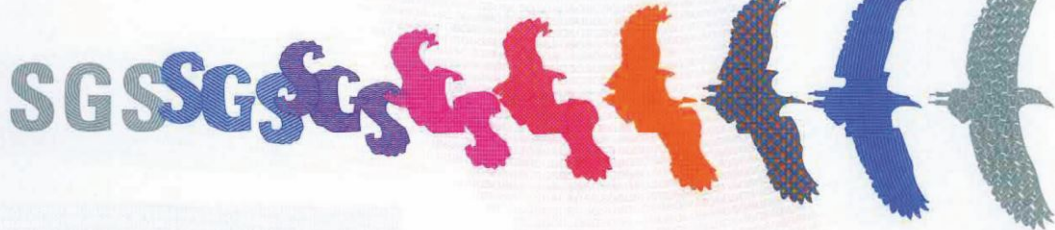
This certificate is valid from 2 February 2010 until 1 February 2013
and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 12 January 2013
Issue 1. Certified since 13 January 2004

Authorised by

SGS United Kingdom Ltd Systems & Services Certification
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

SGS 9001-2 01 0303

Page 1 of 1



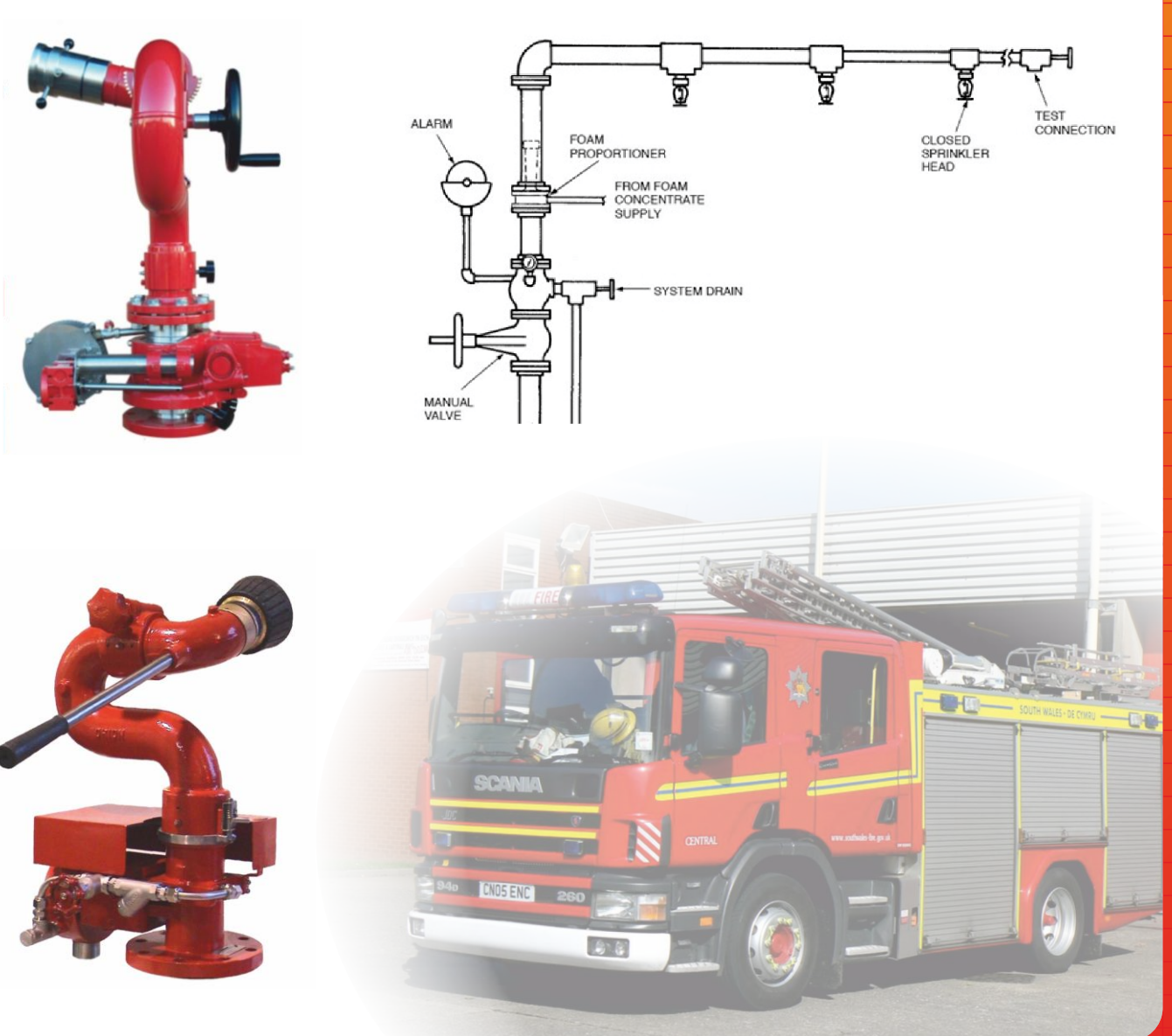
graphic design atelier roger plund printed by metli flexall security printing ltd switzerland

1. FIRE PROTECTION SYSTEMS

1.1. FOAM BASED EXTINGUISHING SYSTEM

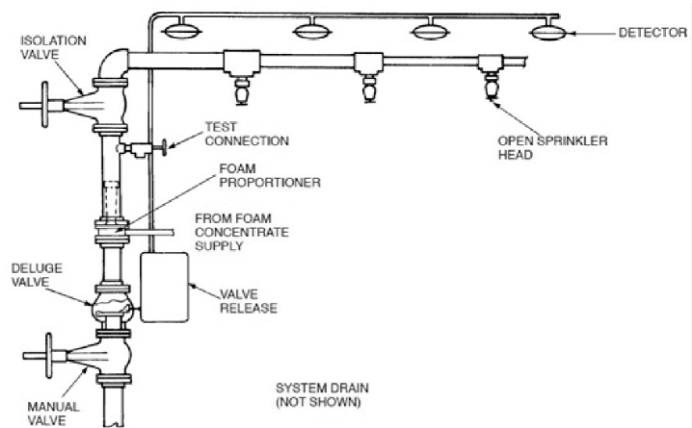
1.1.1. FOAM-WATER SPRINKLER SYSTEM

A special system that is pipe connected to a source of foam concentrate and to a water supply. The system equipped with appropriate discharge devices for extinguishing agent discharge and for distribution over the area to be protected. The piping system is connected to the water supply through a control valve that usually is actuated by operation of automatic detection equipment that is installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system, foam concentrate is injected to the water, and resulting foam solution discharging through the discharge devices generates and distributes foam. Upon exhaustion of the foam concentrate supply, water discharge follows and continuous until shut off manually. Systems can be used for discharge of water first, followed by discharge of foam for a specified period, and then followed by water until manually shut off. Existing deluge sprinkler systems that have been converted to the use of aqueous film-forming foam or film-forming fluoroprotein foam are classified as foam-water sprinkler systems.



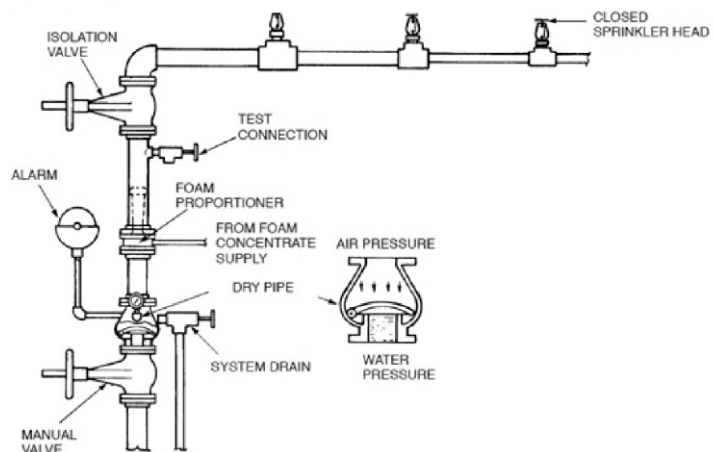
1.1.2. FOAM-WATER DELUGE SYSTEM

A foam-water sprinkler system employing open discharge devices, which are attached to a piping system that is connected to a water supply through a valve that is opened by the operation of a detection system, which is installed in the same areas as the discharge devices. When this valve opens, water flows into the piping system and discharges from all discharge devices attached thereto.



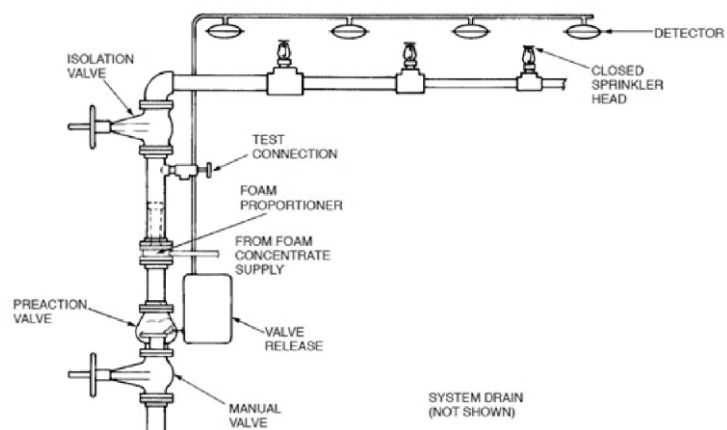
1.1.3. FOAM-WATER DRY PIPE SYSTEM

A sprinkler system employing automatic sprinklers or nozzles that are attached to a piping system that contains air or nitrogen under pressure, the release of which (as from the opening of a sprinkler) permits the water pressure to open a valve known as a dry pipe valve. The water then flows into the piping system and out the opened sprinklers.



1.1.4. FOAM-WATER PREACTION SYSTEM

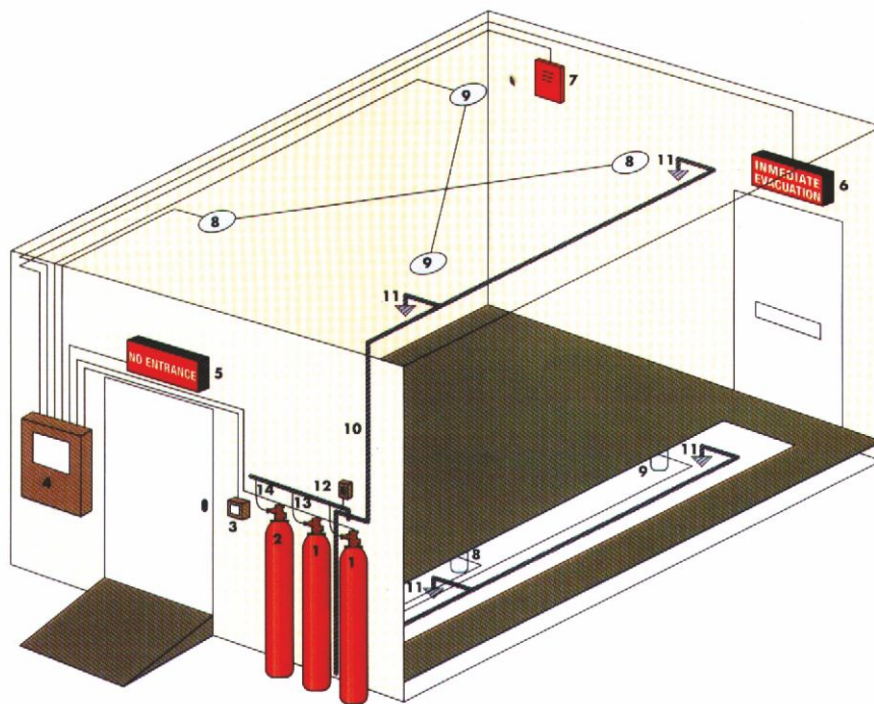
A sprinkler system employing automatic sprinklers or nozzles attached to a piping system containing air that might or might not be under pressure, with a supplemental detection system installed in the same area as the sprinklers. Actuation of the detection system opens a valve that permits water to flow into the sprinkler piping system and to be discharged from any sprinklers that have activated.



1.2. CLEAN AGENT FIRE EXTINGUISHING SYSTEM

The benefits of a Clean Agent Fire Extinguishing System are speed in suppressing fires, reducing damages, saving on floor space and allowing visibility. It leaves no residue and doesn't require costly clean-up, unlike sprinklers and other fire protection systems. Our systems are designed to extinguish a fire quickly and effectively thus allowing businesses to continue operating with minimal interruptions.

Clean Agent Fire Extinguishing Systems are great in applications ranging from telecommunications and data processing to switch gear rooms, military applications and cell sites to high-tech medical applications.



1. Master Cylinder
2. Slave Cylinder
3. Abort Button
4. Control Panel
5. Warning Sign
6. Warning Sign
7. Siren
8. Zone 1 Detector
9. Zone 2 Detector
10. Piping
11. Nozzle
12. Pressure Switch
13. Manifold
14. Discharge Hose

1.2.1. FM-200® GAS BASED FIRE EXTINGUISHING SYSTEM

- Colourless, odourless and non conductive
- No Ozone layer depletion
- Extinguishes fires mainly by physically
- No residue to clean up after discharge
- Suitable for occupied areas
- Widely accepted as substitute to Halon 1301
- Economic
- Discharge time: 10 seconds

Applications: Computer rooms, electrical equipment rooms/centers, industrial areas, valued material storages, archives, museums, telecommunication equipment rooms, oil and gas industry, turbine cabinets.



■ 1.2.2. NAF 125 (HFC 125) GAS BASED FIRE EXTINGUISHING SYSTEM

- Colourless, odourless and non conductive
- No Ozone layer depletion
- Extinguishes fires absorbing heat
- No residue to clean up after discharge
- Suitable for occupied areas
- Widely accepted as substitute to Halon 1301
- Discharge time: 10 seconds

Application: Computer rooms, electrical equipment rooms/centers, values material warehouses, archives etc.



■ 1.2.3. INERT GAS (ARGON IG01) FIRE SUPPRESSION SYSTEM

- Natural gas present in the atmosphere
- Design in compliance with ISO 14520, NFPA 2001 and CEA 4008
- Suitable for occupied areas
- Electrically non-conductive
- No residue to clean up after discharge
- More economical and less storage space
- Zero Ozone Depletion Potential
- No greenhouse effect
- No decomposition products

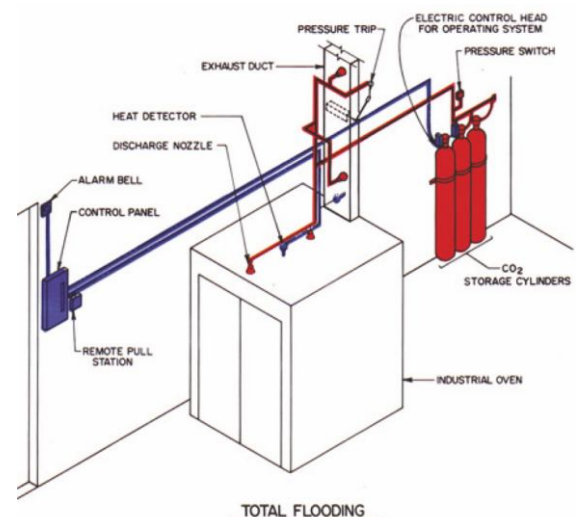
Application: It is ideal for the protection of archives, computer rooms any other electrical installation that may present a fire hazard.



■ 1.3.CO₂ GASEOUS SUPPRESSION SYSTEM

- No Ozone layer depletion
- Extinguishes fires mainly by physically
- Local application or total flooding application
- Not suitable for occupied areas
- Low refilling cost, Locally available and easily refilled
- Discharge time: 60 seconds

Applications: Transformer rooms, electrical equipment rooms/centers, valued material storages, archives, cable and installation galleries, flammable equipments warehouse etc.



1.4. WATER MIST SYSTEM

- Ecological. Does not harm environment
- Safe for the protection of equipment and occupied areas
- Minimal water damage
- Efficient for flammable liquid fires
- Electrically non conductive (use of demineralised water)
- Rapid temperature reduction
- Economical. Minimum cost of extinguishing agent
- Independent system or pumping equipment

Applications: Flammable liquid fires, wet chemical and industrial fires, turbine and generator cabins, transformer rooms, walking ladders and escalators, valued material warehouse, cable and installation galleries, road tunnels.



1.5. FIRE SPRINKLER SYSTEM

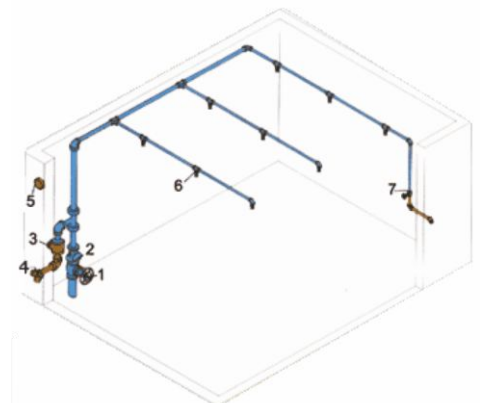
For fire protection purposes, an integrated systems of underground and overhead piping designed in accordance with fire protection engineering standards. The installation includes at least one automatic water supply that supplies one or more systems. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are attached in a systematic pattern. Each system has a control valve located in the system riser or its supply piping. The system is usually activated by heat from a fire and discharges water over the fire area.



1.5.1. WET SPRINKLER SYSTEM

A sprinkler system employing automatic automatic sprinklers attached to a piping system containing water and connected to a water supply so that water discharges immediately from sprinklers opened by heat from a fire.

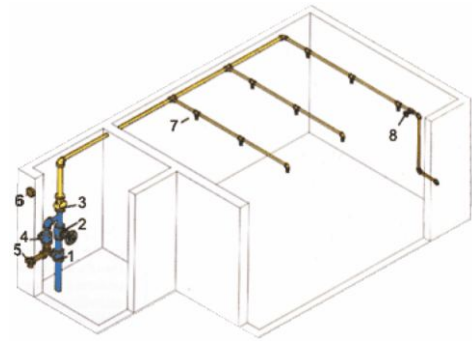
1. Control Valve
2. Wet Alarm Check Valve
3. Check Valve
4. Water Supply
5. Water Motor Gong
6. Automatic Sprinkler
7. Test & Drain Valve



■ 1.5.2. DRY SPRINKLER SYSTEM

A sprinkler system employing automatic sprinklers that are attached to a piping system containing air or nitrogen under pressure, the release of which (as from the opening of a sprinkler) permits the water pressure to open a valve known as a dry pipe valve, and the water then flows into the piping system and out the opened sprinklers.

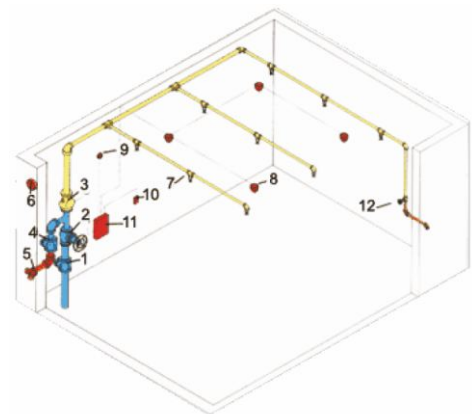
1. Control Valve
2. Alarm Check Valve
3. Dry Pipe Valve
4. Check Valve
5. Water Supply
6. Water Motor Gong
7. Automatic Sprinkler
8. Test & Drain Valve



■ 1.5.3. PRE-ACTION SPRINKLER SYSTEM

A sprinkler system employing automatic sprinklers that are attached to a piping system that contains air that might or might not be under pressure, with a supplemental detection system installed in the same areas as sprinklers.

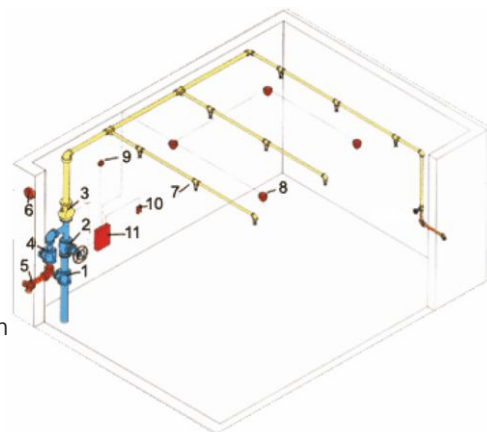
1. Check Valve
2. Control Valve
3. Preaction Valve
4. Check Valve
5. Water Supply
6. Water Motor Gong
7. Sprinkler (closed)
8. Detector
9. Siren
10. Manual Release Station
11. Control Panel
12. Test & Drain Valve



■ 1.5.4. DELUGE SPRINKLER SYSTEM

A sprinkler system employing open sprinklers that are attached to a piping system that is connected to a water supply through a valve that is opened by the operation of a detection system installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system and discharges from all sprinklers attached thereto.

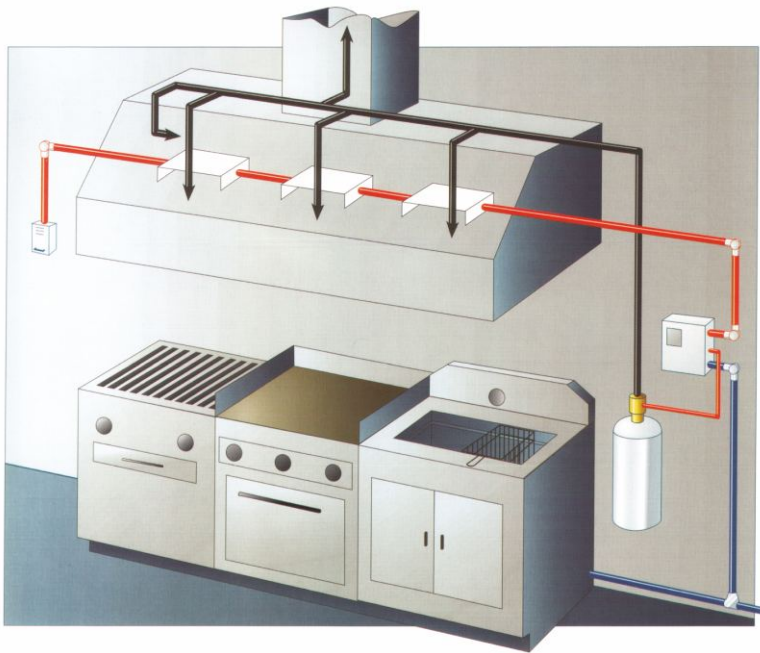
1. Check Valve
2. Control Valve
3. Deluge Valve
4. Check Valve
5. Water Supply
6. Water Motor Gong
7. Sprinkler (open)
8. Detector
9. Siren
10. Manual Release Station
11. Control Panel



1.6. KITCHEN WET CHEMICAL SYSTEM

Wet chemical is most commonly used to extinguish cooking oil fires. It is the primary source of extinguishing kitchen fire's, most of the wet chemical potassium compounds are highly corrosive and have limited uses for fire protection.

Wet chemical suppresses fires by a process called saponification. Saponification is the process of chemically converting the fatty acid contained in the cooking medium to soap, or foam, and it accomplishes extinguishment by forming a surface coating.

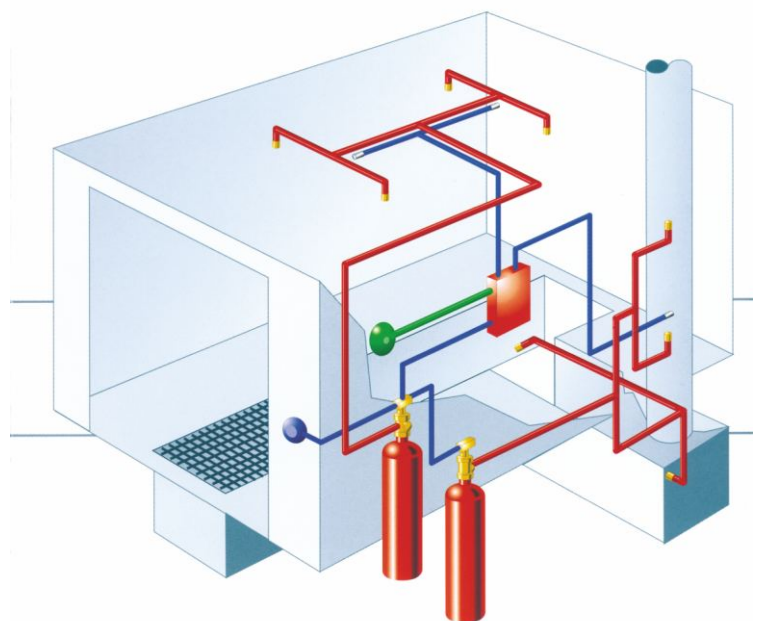


1.7. DRY CHEMICAL FIRE SUPPRESSION SYSTEM

Dry Chemical System, provides 24-hour fire protection for a wide variety of industrial processes, equipment, machinery and paint spray booth applications. The system has the choice of two dry chemical agents effective on Class A, B and C fires.

Total flooding or local application design options. The system includes detectors, a control unit, agent storage cylinders, piping and discharge nozzles.

Application: Paints storage areas, spray paint booths, gas stations



1.8. FIRE PUMPS

Fire pumps are needed when the local municipal water system cannot provide sufficient pressure to meet the hydraulic design requirements of the fire sprinkler system. This usually occurs if the building is very tall, such as in high-rise buildings, or in systems that require a relatively high terminal pressure at the fire sprinkler in order to provide a large volume of water, such as in storage warehouses. Fire pumps are also needed if fire protection water supply is provided from a ground level water storage tank.

The fire pump starts when the pressure in the fire sprinkler system drops below a threshold. The sprinkler system pressure drops significantly when one or more fire sprinklers are exposed to heat above their design temperature, and opens, releasing water.

All pumps are designed and manufactured in accordance with NFPA 20

Electric:

Capacity Range: 100 - 5000 GPM

Pressure Range: 40 - 470 PSI

HP: 20 - 1000 HP

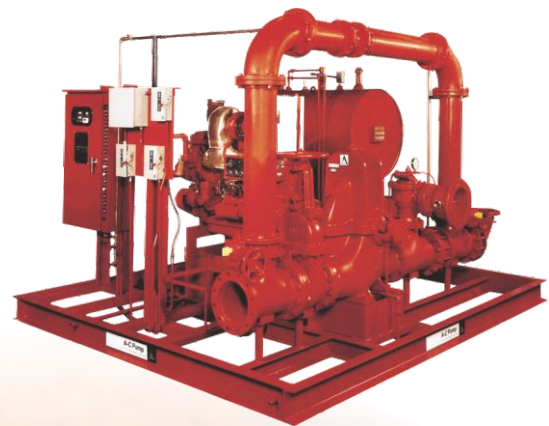
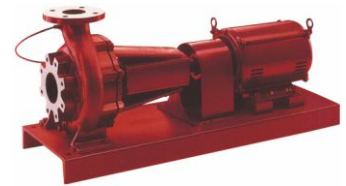
Diesel:

Capacity Range: 100 - 5000 GPM

Pressure Range: 40 - 475 PSI

BHP: 20 - 1000 HP

RPM: 1470 - 3000 RPM



2. FIRE FIGHTING EQUIPMENT

2.1. FIRE CABINETS

2.1.1. SURFACE MOUNTED CABINET

2.1.1.1. MODEL S2

Model S2 is a recessed installation type cabinet with a separate compartment for the accommodation of portable extinguisher or similar equipments. Reel has been fastened on a 180° hanged support and installed on the right side of the cabinet. This model complies with DIN 14461 standard.

Designed and manufacture in accordance with EN 671-1



MODEL	HOSE		SIZE (mm) W x H x D	ORDER CODE
	Diameter (mm)	Length (m)		
S2	25	20	740 x 840 x 250	S2 - 20
S2	25	20	740 x 840 x 200	S2 - 20 - 20
S2	25	30	740 x 840 x 250	S2 - 30

2.1.1.2. MODEL SYR

Model SYR is a cabinet suitable for surface mounting. Rail unit with valve has been installed on the right side of the cabinet.

Designed and manufacture in accordance with EN 671-2



MODEL	HOSE		SIZE (mm) W x H x D	ORDER CODE
	Diameter (mm)	Length (m)		
SYR	52	20	600 x 700 x 200	SYR - 20

2.1.1.3. MODEL HMD Swing Hose Reel

Model HMD mobile hose reels are mounted on a hanged arm. Reel is hanged with 180° slope. Thus hose can be extended in any direction easily without requiring any hose rail.

Designed and manufacture in accordance with EN 671-1



MODEL	HOSE		SIZE (mm) W x H x D	ORDER CODE
	Diameter (mm)	Length (m)		
HMD	25	20	640 x 600 x 190	HMD - 20
HMD	25	30	640 x 600 x 190	HMD - 30
HMD	25	20	640 x 600 x 175	HMD - 20 - 20

■ 2.1.1.4. MODEL STD Fire Extinguisher Cabinet

Model STD is a surface mounted type cabinet for the accommodation of portable extinguisher.



MODEL	SIZE (mm) W x H x D	ORDER CODE
STD	300 x 650 x 200	STD

■ 2.1.1.5. MODEL KYD with Foam Mixer

Model KYD is a surface mounted type cabinet with single compartment including additional 2" fireman valve. Reel has been fastened on a 180° hanged support and installed on the right side of the cabinet. Valve-hose connection of this model complies with DIN 14461 standard.

Designed and manufacture in accordance with EN 671-2



MODEL	SIZE		SIZE (mm) W x H x D	CAPACITY (Lt)	ORDER CODE
	Diameter (mm)	Length (m)			
KYD-B1	2"	20	110 x 90 x 35	30	KYD-B2-20
KYD-B2	2"	20	110 x 90 x 35	60	KYD-B2-30

■ 2.1.2. RECESSED CABINET

■ 2.1.2.1. MODEL G22-R2T with Equipment Compartment

Model G22-R2T is a recessed installation type cabinet with three compartments having vertical divisions for two portable extinguishers. Reel has been fastened on a 180° hanged support and installed on the right side of the cabinet. Valve-hose connection of this model complies with DIN 14461 standard. This model has been designed by considering especially SNIP standard.

Designed and manufacture in accordance with EN 671-1



MODEL	HOSE		SIZE (mm) W x H x D	ORDER CODE
	Diameter (mm)	Length (m)		
G22-R2T	25	20	700 x 1300 x 245	G22-R2T - 20
G22-R2T	25	20	700 x 1300 x 195	G22-R2T - 20 - 20
G22-R2T	25	30	700 x 1300 x 245	G22-R2T - 30

■ 2.1.3. OUTDOOR CABINET

■ 2.1.3.1. MODEL DSH Fire Fighting Equipment Cabinet

Model GYM model is a cabinet suitable for recessed installation. Reel has been fastened on a 180° hanged support and installed on the right side of the cabinet.

Designed and manufacture in accordance with EN 671-2



MODEL	HOSE		SIZE (mm) W x H x D	ORDER CODE
	Diameter (mm)	Length (m)		
DSH	To be determined	20	740 x 840 x 250	DSH-1-85
DSH	based on order	20	740 x 840 x 250	DSH-2-110

■ 2.2. FIRE EXTINGUISHERS

■ 2.2.1. WATER FIRE EXTINGUISHERS

Water is still one of the most useful of all available fire extinguishants. It works through its cooling effect on fire, and under pressure from a controllable-discharge extinguisher, can penetrate and knock out deep-seated Class A fires.

Fire ratings provide a means of measuring the effectiveness of an extinguisher in terms of the maximum size of fire that can be extinguished.

Certified to BS-EN3



■ 2.2.2. FOAM FIRE EXTINGUISHERS

Spray Foam fire extinguishers provide a fast, powerful means of tackling 'A' and 'B' class fires. Highly effective against petrol and volatile liquids, forming a flame smothering seal over the surface and preventing re-ignition. Ideal for multi-risk usage. Fire ratings provide a means of measuring the effectiveness of a fire extinguisher in terms of the maximum size of fire that can be extinguished

Certified to BS-EN3



■ 2.2.3. POWDER FIRE EXTINGUISHER

Dry powder fire extinguishers are a highly versatile Class A, B & C fire-fighting medium suitable for most risks. In addition to dealing with electrical hazards, flammable liquids and gases, powder is also effective for vehicle fires.

Certified to BS-EN3



■ 2.2.4. CARBON DIOXIDE EXTINGUISHER

Fire ratings provide a means of measuring the effectiveness of an extinguisher in terms of the maximum size of fire that can be extinguished. Class B is related to fire surface area and the rating figure to the quantity of flammable liquid in a ratio of 1/3 water, 2/3 fuel that can be extinguished in a circular tray.

Gas is harmless to delicate equipment and materials. Ideal for modern office environments, all electronic risks, and where oils, spirits, solvents and waxes are in use.

Certified to BS-EN3



■ 2.2.5. MOBILE TROLLEY UNITS

Designed to protect large industrial and marine risks, wheeled mobile units can be supplied in a choice of sizes and extinguishant to suit the specific risk.

- Foam
- Powder
- CO₂

Certified to BS-EN1866



■ 2.2.6. STAINLESS STEEL FIRE EXTINGUISHERS

- Corrosion resistant construction.
- Simple seize and squeeze operation.
- Controllable discharge assures efficient use of contents and minimises clean-up.
- Unique tamper evident safety pin with OK indicator.

Certified to BS-EN3



2.3. FIRE HOSES

2.3.1. SYNTEX 500

Applications

- Municipal fire brigades
- Shipboard
- Industrial fire brigades
- Refineries
- Irrigation

Construction

- 100 % high tenacity polyester yarn
- Circular-woven twill weave, warp threads multiple twisted
- High-quality, very light synthetic rubber on the basis of EPDM

Features

- Seawater-resistant, weather-resistant
- Ageing and ozone resistant
- Temperature range from -40 °C up to +100 °C
- Minimum friction loss because of very smooth inner lining
- Light and flexible
- Minimum maintenance
- PU-coating on request



Special Options

- Other diameters
- Maximum lengths up to 500 m
- Individual stencilling (e. g. -Company-logo or-name)
- All international couplings standards

Approvals

- DIN 14811 : 2008 class 1/class 2
- Germanischer Lloyd
- M.E.D. 96/98/EC
- BS 6391 Type 1 (white)
- BS 6391 Type 2 (red coated)

Technical Data

Diameter		Bursting Pressure		Working Pressure		Weight	
in mm	in inch	in bar	in psi	in bar	in psi	in g	
						white	PU-coated
25 (D)	1	60	870	16	235	130	140
38	1 1/2	60	870	16	235	200	210
45	1 3/4	60	870	16	235	240	255
52 (C)	2	60	870	16	235	275	290
65	2 1/2	60	870	16	235	360	375
70	2 3/4	60	870	16	235	430	455
75 (B)	3	60	870	16	235	480	500
102 (A)	4	35	510	12	175	600	640
110 (A)	4 1/3	35	510	12	175	775	825

■ 2.3.2. SYNTEX UNIDUR

Applications

- Municipal fire brigades
- Shipboard, marine and offshore
- Chemical industry
- Refineries, irrigation, agriculture

Construction

- 100 % high tenacity \rightarrow polyester yarn, circular-woven (reinforcement)
- Embedded in a high-quality, special synthetic rubber on the basis of Nitrile/PVC
- Extruded through the polyester weave

Features

- Absolute tough, durable and very abrasion resistant
- Resistance to oil, petrol and a wide range of chemicals
- Temperature range from $-40\text{ }^{\circ}\text{C}$ up to $+100\text{ }^{\circ}\text{C}$
- Resistance to UV and ozone
- Low elongation and very low friction loss
- Excellent adhesion between rubber and textile
- No cleaning or drying required



Special Options

- Maximum lengths up to 120 m
- Individual stencilling (e. g. Company-logo or -name)
- All international couplings
- Standard colour: red (others on request)

Approvals

- DIN 14811:2008 class 3
- BS 6391 Type 3
- prEN 1924 class 4
- M.E.D. 96/98/EC
- Lloyd's Register of Shipping
- Germanischer Lloyd

Technical Data

Diameter		Bursting Pressure		Working Pressure		Weighting
in mm	in inch	in bar	in psi	in bar	in psi	in g
25 (D)	1	70	1.015	20	290	215
38	1 1/2	60	870	20	290	300
45	1 3/4	60	870	20	290	355
52 (C)	2	60	870	20	290	385
65	2 1/2	60	870	20	290	500
70	2 3/4	60	870	20	290	595
75 (B)	3	60	870	20	290	680
102 (A)	4	40	580	15	220	995
150 (F)	6	40	580	15	220	1.665
205	8	30	435	10	145	2.250

■ 2.3.3. SYNTEX SIGNAL

Applications

- Municipal fire brigades
- Shipboard
- Industry
- Military

Construction

- 100 % high tenacity polyester yarn yellow dyed
- Circular-woven twill weave, warp threads multiple twisted
- High-quality, very light synthetic rubber on the basis of EPDM

Features

- By fluorescent signal colour highly visible in darkness and smoke
- Reduces the risk of accidents during operation
- Temperature range from -40 °C up to +100°C
- Minimum friction loss because of very smooth inner lining
- Suitable for seawater, hot water and steam
- Ageing and ozone resistant
- Minimum maintenance



Special Options

- Maximum lengths up to 120 m
- Individual stencilling (e. g. Company-logo or -name)
- All international couplings standards
- Standard colour: yellow (others on request)

Approvals

- DIN 14811 : 2008 class 1
- Germanischer Lloyd

Technical Data

Diameter		Bursting Pressure		Working Pressure		Weighting
in mm	in inch	in bar	in psi	in bar	in psi	in g
25 (D)	1	60	870	16	235	130
42 (C)	1 2/3	60	870	16	235	225
52 (C)	2	60	870	16	235	295
75 (B)	3	60	870	16	235	480
110 (A)	4 1/3	35	510	12	175	780

2.4. NOZZLES

2.4.1. SPRAY NOZZLE

Infinitely variable jet, spray, water curtain and shut-off.

Size: 1/2" - 2 1/2"



2.4.5. BRANCH PIPES

1" - 2 1/2"



2.4.2. CELLAR NOZZLE ROTATING

For universal use for fire-fighting in rooms, preferably for use in places being hard to reach. Nozzle moves itself in forward direction and in use it starts rotating automatically. Extinguishing water running through makes the housing body rotating.

Size: 2"



2.4.6. NOZZLE TIPS

2" - 2 1/2"



2.4.3. JET-SPRAY NOZZLES

Equal flow rate at jet and spray with an additional flush position, no shut-off.

Jet Spray Nozzle: 1" - 2 1/2"



2.4.7. TERRACED NOZZLE TIPS

2 1/2"



2.4.4. AUTOMATIC NOZZLES

Nozzle diameter automatically pressure regulated, no shut-off.

Automatic Nozzle: 2" - 2 1/2"



2.4.8. FOAM NOZZLES

The self-priming foam nozzles (SW/S) have an incorporated foam inductor with regulating valve for 0% - 6% pickup rate. Foam concentrate inlet Storz 25=D, at sw 30/S Storz 52=C.



2.5. SPRINKLER

Standard Spray Sprinkler
Residential Sprinkler
Extended Coverage Light Hazard Sprinkler
Nozzle & Window Sprinkler

Sprinkler Types:

- Upright Sprinkler
- Conventional
- Pendent
- Vertical Sidewall
- Horizontal Sidewall

Temperature Ratings: 57°C, 68°C, 79°C, 93°C, 141°C, 182°C

Water Working Pressure Rate: 175 Psi (12 Bars)

UL Listed, FM Approved



2.6. VALVES

2.6.1. ALARM CHECK VALVE

Alarm Check Valves used in in wet pipe sprinkler systems. They primarily serve a dual purpose in that they prevent a reverse flow of water through their bodies (non-return) and also provide for the use of a hydraulic fire alarm which is not dependent upon an electrical power supply for its operation.

Water Working Pressure Rating – 175 Psi (12 Bars)

Sizes: 3" – 4" – 6" – 8"

UL Listed, FM Approved



2.6.2. GATE VALVE

Working Pressure:

½" – 2" Cold Water, Non Shock 175 lbs

UL Listed, FM Approved



■ 2.6.3. GLOBE VALVE

Working Pressure:

1½" – 1" W.O.G., Non Shock 175 lbs

1¼" – 2" W.O.G., Non Shock 200 lbs

UL Listed, FM Approved



■ 2.6.4. SWING CHECK VALVE

Working Pressure:

W.O.G., Non Shock 200 lbs,

Cold Water, Non Shock 175 lbs

Saturated Steam 125 lbs

Sizes ½" through 12"



■ 2.6.5. WAFER CHECK VALVE

Sizes 4, 6 & 8 inch

Working Pressure: 300 Psi, Non Shock

UL Listed, FM Approved, ULC Listed



■ 2.6.6. OS&Y VALVE

Working Pressure:

200 Psi through 400 Psi

Working Temperature: 0.6°C to 52°C

UL Listed, FM Approved



■ 2.6.7. BUTTERFLY VALVE

Working Pressure:

175 PSI to 300 PSI

Max. Working Temp.: 120°C

Sizes 2 ½" through 8"

UL Listed, FM Approved



■ 2.6.8. BALL VALVE

Threaded or Grooved Body Style

Sizes 1" through 2 ½"

UL Listed, FM Approved



■ 2.6.9. PRESSURE RELIEF VALVE

Factory Mutual Approved

UL Listed Sizes 3" thru 8"

FM Approved Sizes 3" thru 8"

ULC Listed Sizes 2" thru 10"



■ 2.6.10. PRESSURE REDUCING VALVE

Globe or Angle Pattern

Grooved Ends (1 ½" – 8")

UL Listed, ULC Listed, MEA Approved



■ 2.7. MONITORS

■ 2.7.1. MANUAL MONITORS

■ 2.7.1.1. DECK/PORABLE MONITOR

- Compact folding base can be stored in any truck compartment or preconnected in the hose bed
- Legs lock in folded and deployed positions
- Safety stop at 30 degree above horizontal
- Stainless steel ball bearings at all rotation joints
- Liquid filled pressure gauge
- Grease fittings for lubrication
- Red paint finish
- Dual application-use as portable monitor or add the top flange for deck mount use



■ 2.7.1.2. SINGLE WATERWAY MONITOR

- Durable, Lightweight Aluminum Construction
- Corrosion resistant brass construction
- Grease fittings at each swivel joint
- Stainless steel ball bearings at each swivel joint
- 360 degree rotation w/positive lock
- Vanes at each elbow to reduce friction loss, improving range of stream



■ 2.7.1.3. HAND WHEEL MONITOR

- Corrosion Resistant Brass Construction
- Single waterway low friction loss
- Full 360 degree rotation with positive twist lock
- Stainless steel ball bearings
- Red epoxy paint finish
- Vertical travel from 90° above to 60° below horizontal



■ 2.7.2. WATER-POWERED OSCILLATING MONITORS

- The monitor and body of the oscillating unit are manufactured of brass. The water drive wheel is bronze with bronze supply gate valve.
- UL Listed
- Capable of flowing foam or water
- Unique water drive wheel design
- Arc of oscillation adjustable via 6 set points
- Manual override capabilities in both horizontal and vertical degree fields
- Double reduction oil bath gearbox
- Grease fittings and two rows of stainless steel ball bearings at all rotation joints on monitor
- All brass and stainless steel construction
- Monitor has one tiller bar control for manual control
- Unit equipped with a garden hose test connection. This allows functional check of the oscillation mechanism without system flow.



■ 2.8. MISCELLANEOUS

■ 2.8.1. COUPLINGS

German Couplings
Type Storz, Light Alloy



German Couplings
Type Storz, Brass



British Couplings
BS 336



Couplings for
Compressed Air



Russian GOST
Couplings



■ 2.8.2. WATER MOTOR ALARM

Water Motor Alarms are hydraulically operated indoor and outdoor alarms for use with fire protection systems.

UL Listed, FM Approved



■ 2.8.3. PRESSURE SWITCH

It is designed for the detection of a waterflow condition in automatic fire sprinkler systems of particular designs such as wet pipe systems with alarm check valves, dry pipe, preaction, or deluge valves.

The device has a pressure range of 4-15 psi and is 300 psi system pressure rated. It is UL, ULC, CSFM, FM, LPC, NYMEA, and CE approved.



■ 2.8.4. VANE TYPE WATERFLOW ALARM SWITCH WITH RETARD

UL, CUL, CSFM Listed, FM Approved, LPCBA Approved, CE Marked

Service Pressure: 450 Psi (31 Bar)



■ 2.8.5. FLOWMETER

Working Pressure:

34 bar (500 psi) for Butt Welded and Grooved Ends.

19 bar (275 psi) for ANSI 125 Flanged Ends.

FM Approved



■ 2.9. SMOKE & HEAT DETECTORS & SIRENS

■ 2.9.1. SMOKE DETECTOR

Smoke detectors sample the atmosphere every four seconds and the measurements are processed by microprocessor. The processing power is used as part of the design to eliminate unwanted alarms.



■ 2.9.2. HEAT DETECTOR

Heat Detector monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature.



■ 2.9.3. SIRENS

A compact combination of a high output sounder and beacon for areas requiring both audible and visual indication of alarms, ideal for use in noisy manufacturing areas



■ 2.10. FIRE TRUCK

Construction

The superstructure is made of Steel Covering. All components of the superstructure are assembled to an auxiliary frame. This frame is fastened to the main chassis by means of suitable fastening to avoid harmful influences on the bodywork.

Design

In such a way to allow maximum accessibility to all areas

Working Deck

Covered by anti-slip material with light alloy handrails.

Roof Access

Climbing ladder is fixed at the rear part of the vehicle to access the roof of the vehicle. Handgrips are provided where necessary.

Storage Lockers

There are four storage lockers on each sides of the vehicle. The lockers are closed by aluminum roller shutters. The base of the lockers are covered with aluminum plates. Drain holes are provided on the floor of the compartment to supply the water drainage.



■ 3. SAFETY PRODUCTS

■ 3.1. EYE & FACE

■ 3.1.1. EYEWEAR

Practical, durable eyeshield offering high levels of protection and comfort. Fits comfortably over prescription eyewear. Frosted side panels and browguard sections reduce glare/reflections.

EC Category PPE: Category II, Standards EN 166 169, European Directives 89/686/EEC, Optical Class 1, F-Low energy impact



■ 3.1.2. FACE SHIELD

Advanced ergonomic design with 2,784 possible positions, extended chin and top-of-head protection, and a ratcheting headgear mechanism for a secure and comfortable fit.

- AS/NZS 1337 - AS/NZS 1337,
- EC Category PPE - EC Category PPE
- EN 169 / EN 170 / EN166 - Standards EN 169/EN 170/EN166



■ 3.1.3. GOGGLE

Impact resistant polycarbonate lens for excellent protection against flying particles, coarse dusts, liquid droplets, mists and sprays

EN166 - EC Category PPE, Standards EN166, Optical Class I, Impact Grades B& F (low energy impact and medium energy impact), 3 (resistance to liquid droplets), 4 (resistance to large dust particles)



■ 3.2. HEARING

■ 3.2.1. EARMUFF

Earmuffs provide workers with a total solution for both hearing protection and visibility at night – and during the day.

- 29 CFR 1910.95 - OSHA Occupational Noise Exposure (US)
- ANSI S3.19-1974 - Attenuation Test Protocol (US)
- EN-352-1:2002 - EU Standards



■ 3.2.2. EARPLUG

Dual-material design for all-day comfort, easy handling

- 29 CFR 1910.95 - OSHA Occupational Noise Exposure (US)
- ANSI S3.19-1974 - Attenuation Test Protocol (US)
- EN-352-1:2002 - EU Standards



■ 3.3. RESPIRATORING

■ 3.3.1. SELF CONTAINED BREATHING APPARATUS

Specially developed for long duration maintenance operations in an industrial environment, where the atmosphere is toxic or oxygen-deficient.

- EN 139 • EN 142 • EN 137 • EN 136 • CE0194/0060



■ 3.3.1.1 SCBA FOR LONG DURATION OPERATION

It can be used with a cylinder or connected to an external breathable air source. Very comfortable and perfectly versatile, it offers the wearer a total protection of the respiratory tracts. Compliant with EN137:2006, type 2.

- EN137:2006 Type 2 • ISO 9001 • Bureau Veritas for Marine use (SOLAS, MSC and MED)



■ 3.3.1.2. SCBA FOR FIRE FIGHTING AND OIL&GAS INDUSTRY

Self Contained Breathing Apparatus designed for firefighting and Oil&Gas industries. It fulfills the requirements of the most recent EN 137 standard, type 2 classification.

- EN 137:2006 Type 2 • CE0194/0060 • ISO 9001 • Bureau Veritas for Marine use (SOLAS, MSC and MED)



■ 3.3.1.3. SCBA DESIGNED FOR SHIPPING

Self Contained Breathing Apparatus designed for shipping, where such devices are mandatory. It is a user-friendly apparatus allowing a safe and comfortable breathing. Compliant with the most recent MED, SOLAS and EN 137, Type 2 standards.

- EN 137:2006 Type 2 • Bureau Veritas for Marine use (SOLAS, MSC and new MED) • CE0194/0060



■ 3.3.1.4. SCBA FOR FIRE FIGHTING

Self Contained Breathing Apparatus specially designed for firefighting. It is very comfortable thanks to its thermo-compressed harness. It fulfills the requirements of the EN 137:2006 standard, type 2.

- EN137:2006 Type 2 • CE0194/0060 • ISO 9001 • Bureau Veritas for Marine use (SOLAS, MSC and MED)



■ 3.3.1.5. SCBA FOR SHORT INSPECTIONS

Self Contained Breathing Apparatus designed with a jacket. User-friendly and versatile, it is ideal for short inspections in confined spaces or for maintenance operations. Can be used for escape thanks to its 10 to 35 mn autonomy.

- EN 137:2006 Type 1 • CE0194 /0060 • ISO 9001



■ 3.3.1.6. MINI SCBA

Self Contained Breathing Apparatus developed for short-duration operations. Can be connected to an external air source for longer interventions. Light, comfortable and designed for quick donning, it provides the end-user with an excellent comfort and breathing safety. Can also be used for escape.

- EN 402 • ISO 9001



■ 3.3.2. ESCAPE SOLUTIONS

■ 3.3.2.1. ESCAPE HOOD

Compact and easy to use escape hood for chemical emergency. Lightweight bag for optimal comfort in long duration works. Aluminium bag for safe storage. Wide screen and high visible colour for protection and safety while evacuating.



■ 3.3.2.2. EMERGENCY ESCAPE BREATHING DEVICES

Light, compact and easy to use, our Emergency Escape Breathing Devices (EEBD) are perfectly adapted to confined spaces, marine, industrial and Oil & Gas applications. They are available with a duration from 10 to 20 minutes.

- CE 0194 • EN 402 • EN 1146 • ISO 9001



■ 3.3.3. TALLY BOARD

The use of personal tallies registers the firefighter with the Control Board enabling the transfer of data via radio. The data available to the firefighter is repeated on the display of the control board.

- Telemetry JCDD40
- ADSU JCDD38
- Intrinsic Safety EN 50020, EN 50014
- EMC EN 61000-4-3
EN 6100-6-2
- Breathing Apparatus PrEN 137



■ 3.3.4. COMPRESSED AIR CYLINDER

Steel and composite compressed air cylinders meet a wide range of applications, needs, and budgets.

All valves are according to EN 144-1 and 144-2



■ 3.3.5. FRESH AIR-SUPPLY SYSTEM

Fresh Air-Supply systems are usually being used on outside work, where airline systems are not available and one can get easy access to clean air.

- EN 138

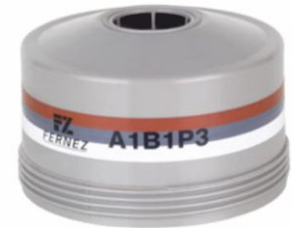


■ 3.3.6. REUSABLE RESPIRATORS

■ 3.3.6.1. FILTERS

Wide range of filters for particulates, gaz/vapor and combined protection. Lightweight filters and ergonomic shape for optimal comfort for long duration works. Resistant plastic case for long durability. Specific threading for enhanced safety.

- EN 14387



■ 3.3.6.2. HALF MASKS FOR SHORT USE

Easy to use, safe and hygienic. Great field of vision thanks to low filters positioning.

- EN 405



■ 3.3.6.3. FULL FACE MASK

Comfortable wear and wide field of vision for long duration works. Soft skirt in silicone with ergonomic design for optimal fitting.

- EN 136



■ 3.3.6.4. SINGLE AND BI-FILTER HALF MASK

Enhanced comfort and long lasting protection. Very soft and comfortable face piece: silicone skirt. Extra-comfortable harness for long duration works.

- EN 140



■ 3.4. INSTRUMENTATION

■ 3.4.1. PORTABLE GAS DETECTOR

In order to evaluate how much the human being is endangered by hazardous substances in the ambient air or explosive mixtures of gases and vapours in the air, appropriate measuring instruments can be used to recognize, measure and monitor dangerous concentrations.

- SGS USTC Class 1 Division 1 Groups, A, B, C, D Temp code T3C (Approved to UL-913)
- SGS/USTC Class II, Division 1, Groups E,F,G
- ATEX (DEMKO) Ex d ia IIC 170C (T3)
- ATEX (DEMKO) Ex d ia IIC 170C (T3)



■ 3.5. FALL PROTECTION

■ 3.5.1. HARNESES

High-quality and ergonomic work harnesses for many areas of application

- EN 358, EN 361, ANSI Z359.1, CSA Z259.10, AS/NZS 1891.1, LA-MARK



■ 3.5.2. FALL ARREST DEVICE

The fall-arrest devices serve to position workers safely during work at heights.

- i.V. m. EN 1496



■ 3.5.3. LANDYARD & WORK POSITION ROPE

■ 3.5.3.1. LANDYARD

Lanyards can consist of ropes or straps and serve direct connection of the catching eyelet of a harness with the fastening point.

- EN 354, EN 355



■ 3.5.3.2. WORK POSITION ROPE

Holding ropes help the user to maintain a good position, which makes his work not only safer but easier too.

- EN 358, ANSI Z359.3



■ 3.5.4. ROPE

It is extremely abrasion-resistant, naturally suitable for sharp edges, and has very low sheath slip. That means it can be used for many abseiling operations and has a high durability.

- EN 892



■ 3.5.5. DESCENDER & RESCUE DEVICE

The descenders are extremely durable and deliver high performance, making them the ideal assistants for rescue operations.

- EN 341 Kl. A, EN 1496, ANSI Z359.4



■ 3.5.6. AUTOMATIC FALL ARREST BLOCKS

Automatic fall arrest blocks are light and compact while possessing the highest functional reliability and resilience. They are safe companion for work at heights day in and day out.

- EN 360



■ 3.6. HYDRAULIC RESCUE DEVICE

■ 3.6.1. CUTTERS

Heavy Duty Blades provide non-slip cutting action. Dual moving blades with spreading capability make this cutter ideal for the heaviest cuts and an excellent performer in simultaneous tool operation situation

- Opening widths up to 10"
- Cutting force up to 248,000 lbs
- Operating pressure 9,135 to 10,440 PSI
- High pressure pigtails, 20" long, equipped with kink protection
- Automatic locking, flat face quick connect couplings



■ 3.6.2. SPREADER

Made from a high-strength yet light-weight metal alloy. With high forces for spreading, pulling and squeezing applications.

- Spreading widths up to 32 1/4"
- Spreading force up to 156,195 lbs
- Operating pressure 9,135 to 10,440 PSI
- High pressure pigtails, 20" long, equipped with kink protection
- Automatic locking, flat face quick connect couplings



■ 3.6.3. COMBINATION TOOL

A combination tool with an exceptional performance: extreme spreading width and force, cuts with a "bite". The cutting blades are replaceable.

- Spreading width up to 18"
- Unique: design is based on the construction principle of a spreader
- Operating pressure 9,135 to 10,440 PSI
- High pressure pigtails, 20" long, equipped with kink protection



■ 3.6.4. RESCUE RAMS

Rescue rams are the ideal complement to spreading tools.

- Opening widths up to 63" / Spreading force up to 50,400 lbs
- Operating pressure 9,135 to 10,440 PSI
- High pressure pigtails, 20" long, equipped with kink protection
- Automatic locking, flat face quick connect couplings



■ 3.6.5. PULLING CHAIN

Pulling chains can be attached directly to the tips of the spreaders without tip exchange.

The required length is easily adjusted by inserting the chain links into the attached collet.



■ 3.6.6. MISCELLANEOUS POWER UNITS

■ 3.6.6.1. POWER UNITS

- Power Units with Gasoline Engine
- Power Units with Electric Motor
- Atex Certified Power Units



■ 3.6.6.2. MOBILE

- Gasoline Engine
- Electric Engine
- Diesel Engine



■ 3.6.6.3. HAND & AIR HYDRAULICS

Compressed Air Hydraulic Pump

- Low weight, easy to use, very mobile
- Low operating noise



Hand Pump

- Low weight, easy to use, very mobile
- Automatic switch-over from low to high pressure for quick work
- Flow rate low pressure: 10,8 cm³



■ 3.7. GLOVES

■ 3.7.1. CHEMICAL

- Gloves for Chemical Industry
- Coated Seamless Knits
- Cut & Sewn
- Linemen
- Metal Mesh
- Seamless Knits
- Sleeves



■ 3.8. PROTECTING CLOTHING

■ 3.8.1. REUSABLE TECHNICAL WORKWEAR

Chemical reusable protective suit. Gassight available with SCBA outside or inside.

- EN 943-1 A - Performance requirements for ventilated and non-ventilated "gas-tight" chemical protective suits. Type A: with a breathable air supply
- EN 943-1 B - Performance requirements for ventilated and non-ventilated "gas-tight" chemical protective suits. Type B: with a breathable air supply



Head-to-toe protection for the user against accidental contact with a flame, molten aluminium and metal splashes, convective heat and high radiant heat.

- EN ISO 11612:2008 (A1-B1-C3-D3-E3-F1) - Heat and flame protection clothing



Intended to protect the user against small molten metal splashes, short-term contact with flame and radiant heat from the arc.

- EN ISO 11612:2008 (A1-B1-C1-E2) - Heat and flame protection clothing.
- EN ISO 11611:2007 (A1- Class 1) - Protective clothing used for welding and related technical operations.



Lightweight and effective, ensures protection against hazards of contact with fire, convective heat, radiant heat and the risks associated with the accumulation of electrostatic charges.

- PPE of category 3 - European Directive
- EN 340 - Protective clothing - General requirements
- EN 469: 2005 - Protective clothing for the fire brigade and fire fighting
- EN 1149-5: 2008 - Electrostatic properties. Materials and design performance requirements.



Complete head-to-toe clothing, it protects the user against insect bites and prevents wasp and hornet stings.

- EN 340/2003 - General ergonomics and size requirements



■ 3.8.2. SINGLE USE CLOTHING

Breathable single use protective suits designed to protect against particles contamination and chemical splashes.

- Airborne Particulates
- Biohazard
- Chemical
- Contamination
- Splash



Single use protective suit designed to protect against particles contamination and chemical contamination.

- Airborne Particulates
- Biohazard
- Chemical
- Contamination
- Splash



Range of liquid tight single use protective clothing designed to protect against chemicals.

- Airborne Particulates
- Chemical
- Contamination
- Splash



Range of liquid tight single use protective clothing designed to protect against chemicals.

- Airborne Particulates
- Chemical
- Contamination
- Splash



■ 3.8.3. WORKWEAR

A complete range of comfortable workwear parkas offering protection against all types of foul weather with watertight seams, padded linings, waterproof outershells and breathable coatings

For those working indoor, a complete range of functional, windproof and warm waistcoats offering comfort and protection

- 89/686/EEC - Comply with the European directive 89/686/EEC and the EN standard 340-PPE category



Functional and stylised trousers suitable with all workwear styles, foul weather conditions product line or high visibility product line.

- 89/686/EEC - Comply with the European directive 89/686/EEC and the EN standard 340 - PPE category



Ideal waterproof, windproof parkas that will protect you on low visibility environment.

- European Directive 89/686/EEC standards 471 Class 3, EC Category PPE II and EN 340 Protective Clothing General requirements



■ 4. MARINE SAFETY

■ 4.1. LIFE SAVING APPLIANCES

■ 4.1.1. SURVIVAL SUIT

- 6 hours thermal protection
- Insulated 5 finger gloves
- Ankle and wrist adjustments for a snug fit
- Light pocket
- Reflective panels, whistle
- Non-slip soles
- Approved according to MED
- Complies with latest requirement of SOLAS'74



■ 4.1.2. THERMAL PROTECTIVE AID

- Thermal protective aid with sleeves covering the whole body
- With hood and long zipper for easy donning
- Reflective panels
- Metallic inside layer to retain body heat
- Waterproof
- Approved according to MED
- Complies with latest requirement of SOLAS



■ 4.1.3. LIFEBOUOY

- Colour: orange
- Reflective panels
- Grabline
- Approved according to MED
- Complies with latest requirement of SOLAS'74/96 and LSA Code



■ 4.1.4. BUOYANT CUSHION

- With reflective panels and grabline
- Oil resistant
- Flame resistant
- Approved according to MED
- Complies with latest requirement of SOLAS



■ 4.1.5. LIFE JACKET

- Additional collar provides excellent floating position
- Colour: orange
- Buoyancy: 190 Newton
- Reflective panels
- Whistle
- Approved according to MED
- Complies with latest requirement of SOLAS



■ 4.1.6. MOB - LIGHT - SMOKE - SIGNALS

- Position marking of a lifebuoy ring MOB system
- Smoke duration: 15 min
- Light duration: 2 hrs
- With bracket



■ 4.1.7. HELICOPTER RESCUE BASKET

- MOB rescue device for helicopter rescue operations
- Stainless steel basket
- Floatable basket with 2 ethafoam cylinders, orange with reflective panels
- Bails can be folded for compact storage



■ 4.2. HELICOPTER RESCUE EQUIPMENT

■ 4.2.1. RESCUE EQUIPMENT FOR HELICOPTER DECK

The following rescue equipment is required for any vessel with helicopter deck according to SOLAS II-2 regulation:

- Adjustable wrench
- Fire blanket
- Bolt cutter 60 cm
- Grab / salvage hook
- Metal hacksaw, heavy duty, complete with 6 spare blades
- Ladder
- Wire cutting pliers
- Set of assorted screwdrivers

■ 4.3. LIFERAFTS

Life Rafts are packed in rugged deck mountable fiberglass containers. Small profile, life raft container remains secure and resistant to the harsh marine environment



■ 4.4. OIL SPILL KIT

- Different sizes
- Stored in: GPR box
- Colour: yellow
- Watertight
- Lockable



■ 4.5. COMMUNICATION

■ 4.5.1 HAND HELD MARINE RADIO

- Low battery indicator
- Battery save function
- Housing: die cast aluminium
- Resistant to: heat, pressure, water, vibrations



■ 4.5.2. RADAR TRANSPORDER

- 9 GHz x-band transceiver
- Remains in standby mode for 96 hrs
- Waterproof up to 10 m
- Incl. wall mounting



■ 4.6. EMERGENCY & SAFETY LIGHTS, SIGNALS

- Emergency Lights for Survival Suits & Life Jackets
- Lifebuoy Light
- Liferaft and Lifeboat Lights
- Marker Light
- Solar Marine Light
- Personnel Marker Light



■ 4.7. RESCUE BOATS

The MOB boat is delivered in rigid orange fire-retardant GRP materials with capacity for 5+1 persons.

Approved according to SOLAS 1974/96, LSA code MSC 81(70) IMO, Res. MSC.218(82) and IMO Res MSC.226(82), Part 1, Section 7 and EU Directive 96/98/EC.

The rescue boat can be re-righted after capsized by two men



■ 4.8. DECK EQUIPMENT

■ 4.8.1. EMBARKATION LADDER

The ladder is produced by weatherproof material which secure the ladder a longer endurance. Aluminium clamps guarantee a firm hold of the steps. Through the use of polyamid wedges, one can dispense with the reinforced wooden steps. Available in different lengths.



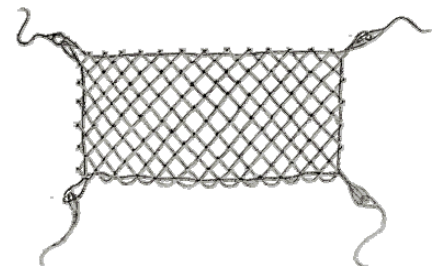
■ 4.8.2. PILOT LADDER

- Manufactured according to LSA code precepts
- Produced in manilla ropes
- DIN ISO 799-1986
- Available in different lengths



■ 4.8.3. GANGWAY NET

- Material: Polypropylene
- Different Colors and Sizes



5. HIGH INTEGRITY HVAC PRODUCTS

5.1. FIRE DAMPER

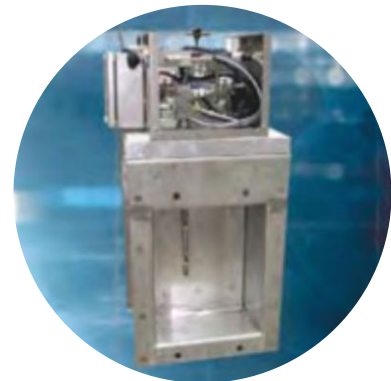
They are used in ventilation and climatisation systems to block the fire propagation through the air ducts.

- Stainless Steel or Galvanised Mild Steel
- Frames in a range of thickness from 2-10mm
- Removable linkage
- Continuous blade shafts
- Bearings: Roller or ball race
- Earth Continuity Bosses
- Lifting Lugs
- Pre-insulated controls enclosure
- Client specific requirements



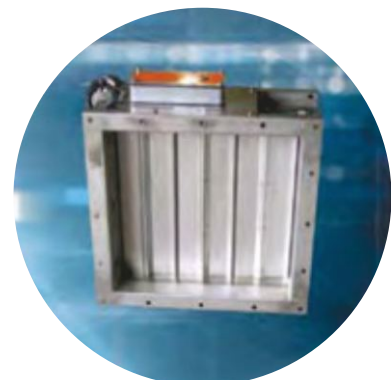
5.2. FIRE AND GAS DAMPER

- Stainless Steel or Galvanised Mild Steel
- Frames in a range of thickness from 2-10mm
- Removable linkage
- Continuous blade shafts
- Bearings: Roller or ball race
- Earth Continuity Bosses
- Lifting Lugs
- Pre-insulated controls enclosure
- Client specific requirements



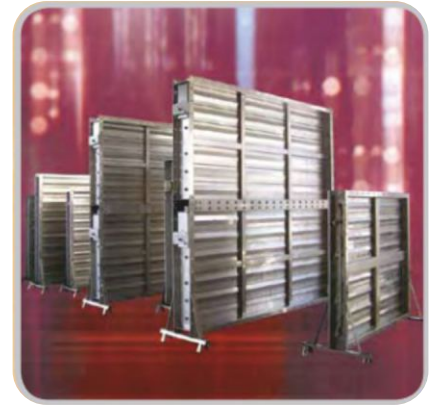
5.3. FIRE AND SMOKE DAMPER

- Frames in a range of thickness from 2-10mm
- Removable linkage
- Continuous blade shafts
- Bearings: Roller or ball race
- Earth Continuity Bosses
- Lifting Lugs
- Pre-insulated controls enclosure
- Client specific requirements



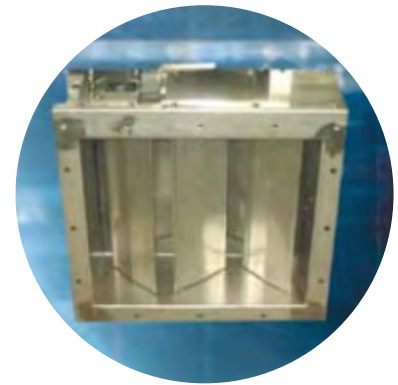
5.4. ISOLATION DAMPER

- Continuously welded construction
- Opposed blade motion
- Low casing leakage
- Low blade leakage
- Manual, pneumatic, or electric operation
- Wide range of materials and controls
- Excellent corrosion resistance



5.5. VOLUME CONTROL AND MODULATING DAMPER

- Continuously welded construction
- Opposed blade motion
- Low casing leakage
- Low blade leakage
- Manual, pneumatic, or electric operation
- Wide range of materials and controls
- Excellent corrosion resistance



5.6. NON-RETURN/PRESSURE RELIEF DAMPER

- Continuously welded construction
- Parallel blade motion
- Excellent corrosion resistance



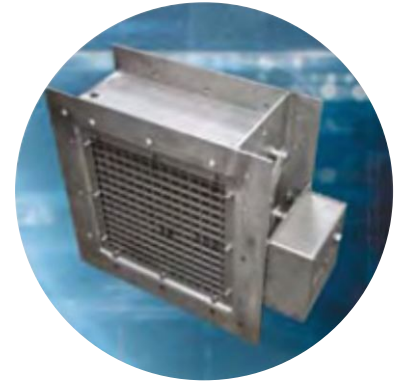
5.7. BLAST DAMPERS

1. Blast Resistant Damper

Designed for the offshore and onshore oil and gas industries Blast Resistant Damper is a robust heavy duty device used as an HVAC louvre on a module or building blast wall.

2. Blast Protection Damper

This is a unique device that, in conjunction with a Blast Resistant Damper is designed to not only maintain integrity after a blast event but also to reduce over pressurisation to a safe level, protecting personnel and equipment.



5.8. WEATHER, RAIN & SAND LOUVERS

The louvres are well suited to ventilation and power generation air intake and exhaust applications as well as louvre cladding systems. The function of the weather louvre is to prohibit the ingress of wind driven rain into the ventilation system. Three configurations of louvre are available with a range of efficiency performance to suit particular applications.



5.9. CHEMICAL FILTER

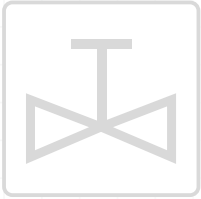
Norm Teknik supplies complete line of air purification systems and offers complete range of services.

Chemical media of the filters provides continuous purification of contaminated air present in industrial and commercial environments.

Odor and Corrosion Control Applications

- Pulp & Paper
- Digesters
- Incineration Plants
- Oil & Gas Refineries
- Exhaust Pressurization
- Garbage Depots
- Clarifiers
- Wet Wells
- Process Areas
- Waste Transfer Stations
- Emergency Safe Rooms





For your inquiries please contact us:

By E-mail : norm@normteknik.com.tr

By Phone : +90.216.311.40.41

By Fax : +90.216.311.90.90

By Mail : Eyüp Sultan Mah. Ulubatlı Hasan Cad.
Başkent Sok. No:6 34885 Sancaktepe
İstanbul - Turkey

Norm Teknik reserves the right under its product improvement policy to change design details and furnish equipment when so altered with reference some of the items in this catalog. These "Non Manufactured" products are sold subject to the manufacturers' specifications, representations and warranties. Norm Teknik assumes no responsibility for the accuracy of such manufacturers statements. It is the sole responsibility and duty of the purchaser to determine that a particular product is suitable for the usage anticipated, and complies with all applicable regulations, standards, and statutes governing such usage.

OIL & GAS

OIL&GAS REFERENCES

PROJECT NAME	KASHAGAN DEVELOPMENT EXPERIMENTAL PROGRAMME OFFSHORE PHASE-KAZAKHSTAN
CONTRACT VALUE	APPROX. 1.970.000 USD
INVESTOR	AGIP KCO
SCOPE OF SUPPLY	FIRE FIGHTING & SAFETY EQUIPMENTS (EP PROJECT)
COMPLETION YEAR	2011-2012



PROJECT NAME	KASHAGAN FIELD DEVELOPMENT PROJECT TRANCHE-3 POWER GENERATION PLANT-KAZAKHSTAN
CONTRACT VALUE	APPROX. 1.600.000 USD
INVESTOR	AGIP KCO
CONTRACTOR	GATE CONSTRUCTION (GAMA & TEKFEN PARTNERSHIP)
SCOPE OF SUPPLY	GAS BASED FIRE EXTINGUISHING SYSTEM, WATER MIST SYSTEM, FIRE&GAS DAMPERS, SHUT-OFF DAMPERS, LOW LEAKAGE DAMPERS, SAND TRAP LOUVERS (EP PROJECT)
COMPLETION YEAR	2011-2012



PROJECT NAME	SOUTH YOLOTEN GAS FIELD DEVELOPMENT PROJECT TURKMENISTAN
CONTRACT VALUE	500.000 USD
INVESTOR	TURKMENGAS
MAIN CONTRACTOR	PETROFAC
CONTRACTOR	TEKFEN CONSTRUCTION
SCOPE OF SUPPLY	CHEMICAL FILTER, DAMPERS, FIRE EXTINGUISHERS, PIPE & FITTINGS,(EP PROJECT)
COMPLETION YEAR	2012



PROJECT NAME	LAM C WELLHEAD OFFSHORE PLATFORM - TURKMENISTAN
CONTRACT VALUE	22.500 GBP
INVESTOR	DRAGON OIL
CONTRACTORS	ILK CONSTRUCTION
SCOPE OF SUPPLY	FIRE DAMPERS, ELECTRIC SHUT-OFF DAMPERS (EP PROJECT)
COMPLETION YEAR	2012



PROJECT NAME	KASHAGAN DEVELOPMENT EXPERIMENTAL PROGRAMME ONSHORE PHASE KIB ADDITIONAL BUILDINGS - KAZAKHSTAN
CONTRACT VALUE	400.000 USD
INVESTOR	AGIP KCO
MAIN CONTRACTOR	TEKFEN CONSTRUCTION
SCOPE OF SUPPLY	BLAST RESISTANCE DAMPERS, VOLUME CONTROL DAMPERS, FIRE DAMPERS, FIRE&GAS DAMPERS, ISOLATION/SHUT-OFF DAMPERS, PRESSURE RELIEF DAMPERS (EP PROJECT)
COMPLETION YEAR	2009



PROJECT NAME	KASHAGAN DEVELOPMENT EXPERIMENTAL PROGRAMME ONSHORE PHASE KIB MAINWORKS (9 BUILDINGS) - KAZAKHSTAN
CONTRACT VALUE	1.600.000 USD
INVESTOR	AGIP KCO
MAIN CONTRACTOR	TEKFEN CONSTRUCTION
SCOPE OF SUPPLY	BLAST RESISTANCE DAMPERS, VOLUME CONTROL DAMPERS, FIRE DAMPERS, FIRE&GAS DAMPERS, ISOLATION/SHUT-OFF DAMPERS, PRESSURE RELIEF DAMPERS (EP PROJECT)
COMPLETION YEAR	2008



PROJECT NAME	SAMIR PETROLEUM REFINERY UPGRADE – MOROCCO
CONTRACT VALUE	100.000 USD
INVESTOR	SOCIETE ANONYME MAROCAINE DE L'INDUSTRIE DU RAFFINAGE (SAMIR)
CONTRACTOR	TEKFEN CONSTRUCTION
SCOPE OF SUPPLY	FIRE DAMPERS, FIRE SMOKE DAMPERS (EP PROJECT)
COMPLETION YEAR	2008



PROJECT NAME	TUPRAS IZMIT & IZMIR REFINERY UPGRADING
CONTRACT VALUE	300.000 USD
INVESTOR	TUPRAS A.S.
SCOPE OF SUPPLY	FM-200 GAS BASED FIRE EXTINGUISHING SYSTEM, FIRE CABINETS, SPRINKLER SYSTEM
COMPLETION YEAR	2004 & 2008



PROJECT NAME	BAKU-TBILISI-CEYHAN PIPELINE PROJECT
CONTRACT VALUE	200.000 USD
INVESTOR	THE BAKU-TBILISI-CEYHAN PIPELINE COMPANY
CONTRACTOR	PETROFAC
SCOPE OF SUPPLY	FIRE FIGHTING & SAFETY EQUIPMENTS (EP PROJECT)
COMPLETION YEAR	2004



INDUSTRIAL REFERENCES

PROJECT NAME	OTOGAR İKİTELLİ LIGHT RAILWAY AND SUBWAY CONSTRUCTION
INVESTOR	İETT
MAIN CONTRACTOR	GÜLERMAK & DOĞUŞ PARTNERSHIP
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF IG-01 (ARGON) GASEOUS EXTINGUISHING SYSTEMS
CONTRACT VALUE	6.000.000 USD
COMPLETION YEAR	2011-2012



NORM
TEKNİK
Fire Protection Systems



PROJECT NAME	NATIONAL ARCHIVES COMPLEX
INVESTOR	T.C. BAŞBAKANLIK
MAIN CONTRACTOR	SİYAHKALEM MÜHENDİSLİK İNŞAAT SAN. ve TİC. LTD. ŞTİ.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FM200 GASEOUS EXTINGUISHING SYSTEMS
CONTRACT VALUE	3.000.000 USD
COMPLETION YEAR	2011-2012



NORM
TEKNİK
Fire Protection Systems



PROJECT NAME	VODAFONE MTX EXCHANGE BUILDINGS IN TUZLA & ESENYURT
INVESTOR	VODAFONE TELEKOMÜNİKASYON ALT YAPI HİZ. A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF IG-55 GASEOUS EXTINGUISHING SYSTEM
CONTRACT VALUE	380.000 USD
COMPLETION YEAR	2011



PROJECT NAME	REISSWOLF PELİTLİ WAREHOUSE
INVESTOR	REISSWOLF ARŞİVLEME
SCOPE OF SUPPLY	SPRINKLER SYSTEM, FIRE CABINET SYSTEM & PUMP STATION (EP PROJECT)
CONTRACT VALUE	300.000 USD
COMPLETION YEAR	2011



PROJECT NAME	MERCEDES BENZ HOŞDERE FACTORY
INVESTOR	MERCEDES BENZ TÜRK A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF SPRINKLER SYSTEM & FIRE PUMP STATION
CONTRACT VALUE	340.000 USD
COMPLETION YEAR	2010



PROJECT NAME	CARGILL ORHANGAZI FACTORY
INVESTOR	CARGILL TARIM ve GIDA SAN. TIC. A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF ARGON (IG-55) GASEOU EXTINGUISHING SYSTEM & DETECTION SYSTEMS
CONTRACT VALUE	234.000 USD
COMPLETION YEAR	2010



PROJECT NAME	AWAZA ve AHAL THERMAL POWER PLANT
INVESTOR	MINISTRY OF ENERGY OF TURKMENISTAN
MAIN CONTRACTOR	LOTUS ENERJİ A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF TRANSFORMER COOLING SYSTEM
CONTRACT VALUE	54.000 USD
COMPLETION YEAR	2009



PROJECT NAME	SABİHA GÖKÇEN INTERNATIONAL AIRPORT INTERNATIONAL TERMINAL
INVESTOR	LİMAK İNŞAAT-GMR ADİ PARTNERSHIP
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FM200 GAS BASED FIRE EXTINGUISHING SYSTEM & WET CHEMICAL KITCHEN WET CHEMICAL SYSTEM
CONTRACT VALUE	215.000 USD
COMPLETION YEAR	2009



PROJECT NAME	İÇDAŞ ÇALIK ENERGY BİGA FACTORY
INVESTOR	İÇDAŞ ÇALIK ENERJİ TERSANE ve ULAŞIM SAN. A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FM-200 GAS BASED FIRE EXTINGUISHING SYSTEM & CENTRAL FIRE MONITORING SYSTEM
CONTRACT VALUE	950.000 USD
COMPLETION YEAR	2008



PROJECT NAME	OYAK RENAULT - BURSA
INVESTOR	OYAK RENAULT OTOMOBİL FABRİKASI A.Ş.
SCOPE OF SUPPLY	SPRINKLER SYSTEM (EP PROJECT)
CONTRACT VALUE	350.000 USD
COMPLETION YEAR	2007



PROJECT NAME	OLMUKSA INTERNATIONAL PAPER - İNEGÖL FACTORY
INVESTOR	OLMUKSA INTERNATIONAL PAPER - SABANCI AMBALAJ SANAYİ ve TİCARET A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF SPRINKLER & FIRE CABINET SYSTEM, FIRE DETECTION SYSTEMS, FIRE PUMP STATION
CONTRACT VALUE	580.000 USD
COMPLETION YEAR	2007



PROJECT NAME	FIRAT PLASTİK BÜYÜKÇEKMECE FACTORY
INVESTOR	FIRAT PLASTİK KAÜÇUK SAN VE TİC.A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FIRE PUMP STATION & SPRINKLER SYSTEM
CONTRACT VALUE	155.000 USD
COMPLETION YEAR	2007



PROJECT NAME	ÇALIK ENERGY AŞKABAT STATION
INVESTOR	ÇALIK HOLDİNG A.Ş.
SCOPE OF SUPPLY	TRANSFORMER COOLING SYSTEM (EP PROJECT)
CONTRACT VALUE	25.5000 EUR
COMPLETION YEAR	2006



PROJECT NAME	SUNJÜT FIBC's WORLDWIDE HADIMKÖY & DUDULLU FACTORIES
INVESTOR	SUNJÜT FIBC's WORLDWIDE
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF SPRINKLER SYSTEM
CONTRACT VALUE	23.000 USD
COMPLETION YEAR	2005



PROJECT NAME	ELTA SÜNGER A.Ş.-BFTC
INVESTOR	TEKNİK MALZEME TİC. VE SAN. A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FIRE CABINETS, SPRINKLER SYSTEM & FIRE PUMP STATION
CONTRACT VALUE	110.000 USD
COMPLETION YEAR	2004



PROJECT NAME	TOFAŞ DYEHOUSE
INVESTOR	TOFAŞ TÜRK OTOMOBİL FABRİKASI A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF FOAM BASED FIRE EXTINGUISHING SYSTEM
CONTRACT VALUE	45.000 USD
COMPLETION YEAR	2003



PROJECT NAME	VALEO OTOMOTİV BURSA FACTORY
INVESTOR	VALEO OTOMOTİV SERVİS A.Ş.
SCOPE OF SUPPLY	TURNKEY CONSTRUCTION OF SPRINKLER SYSTEM & FIRE PUMP STATION
CONTRACT VALUE	86.000 USD
COMPLETION YEAR	2001



NORM[®]
TEKNİK
Fire Protection Systems

**NORM TEKNİK MALZEME
TİCARET İNŞAAT SANAYİ LTD. ŞTİ.**

Eyüp Sultan Mah. Ulubatlı Hasan Cad.
Başkent Sk. No:6 34885

Samandıra - Sancaktepe / İSTANBUL

Tel:+90 216 311 40 41 pbx Fax:+90 216 311 90 91

e-mail: norm@normteknik.com.tr

ANKARA OFFICE

A.Öveçler 2. Cadde (1065 Cadde)

No: 29/1 065620 Çankaya/ANKARA

Tel:+90 312 472 78 88 pbx Fax:+90 312 472 78 89

e-mail: ankara@normteknik.com.tr

www.normteknik.com.tr

