VISION ENGINEERING

Fire fighting
Electric
Construction

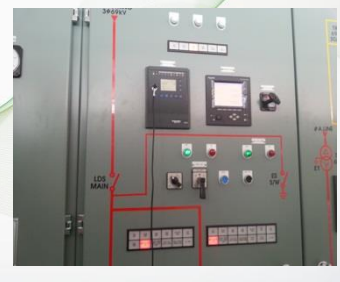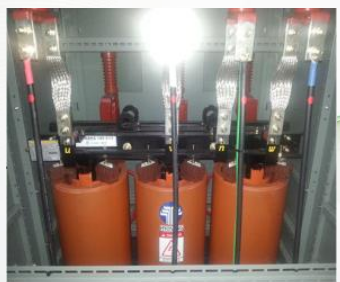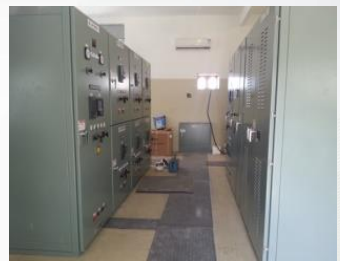**Fire Fighting Planning** → **Fire Fighting Consulting** → **Fire Fighting R&D** → **Fire Fighting Construction**

Installation of 69 kV substation

[Photo electrical construction]

- Substation project 69kV
- 13.8kv cubicle
- Mold TR
- Control panel

Installation of 69 kV substation

[Photo electrical construction]

- Installation of high and low voltage cubicle
- Installation of lighting panel
- Installation of power panel
- condenser

Installation of fire fighting

[Photo installation]

- Central valve
- Alarm valve
- Test valve
- Installation of Sprinklers

Installation of fire fighting

[Photo electrical construction]

- Valve of repression
- Installation kit transmitter and fight fire Hydrant
- Monitoring system
- Monitoring system transmitter (NOTIFIRE)

Sprinkler Pressure Monitoring System

○ **Sprinkler Pressure Monitoring System remotely monitors and controls pressure to inside of pipe.**

○ **Sprinkler Pressure Monitoring System is Fire Alarm Total Solution System that is not be supported in Conventional Fire Alarm System.**

MOBILE REMOTE MONITOR

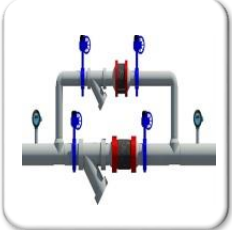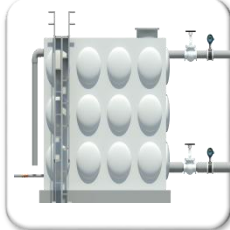**Fire Prevention Total Monitoring/Control System**

Fiber-Optic Cable
Ethernet

Fiber-Optic Cable
Ethernet

- LAN Communication System
- RS 485 TSP AWG #16
  (1Pair/3C X 2 Line)

MAIN CONTROLLER

Fire Alarm Control Panel

Composition	Fire Alarm Control Panel + 3D Graphic CRT
FACP Size	650(W) x 1300(H) x 200(D)
Power	Commercial electricity AC 220V – Battery 24V(120minutes)
Circuit	basic 31Point X 10CH X 10Board(Option Making)
NODE	Fire Alarm Control Panel 1~100ea, Each Block can be extended.
Communication System	RS 485 Communication(1.2km) /Ethernet Optical-Single Mode
Program	LCD display and notebook in front of Fire Alarm Control Pane
CRT Spec	Industrial Computer Commercial Power AC 220V
Communication System	RS 485 Loop System or Style 6
Expendability	Free Expendability between Sub FACP with Main FACP.
Control/Monitor	Control(Pump, Valve, Fan, Sound etc.) Monitor(Digital, Contact, Detector)
Language	Korean, English, Chinese, Japanese. Various language can be translated

Sprinkler Pressure Monitoring System CRT

Operating System	**Windows 7 Professional edition**	
Hardware	HMI Computer	- Maker : HP
		- CPU : Intel Xeon W3550(3.0GHz)
		- Main Memory : 4GB
		- HDD : 500GB
		- DVD+CD-RW Combo
		- 10/100 LAN Card
		- Keyboard and Mouse
	23" TFT LED Monitor	- Maximum resolution : 1680 x 1050
		- brightness : 300 cd/m2
	Basic S/W & HMI Tool	-HANGLE MS Windows7 Professional
		- HANGLE MS Office
		- HMI Software
	Network Equipment	- Fiber Optic Ethernet Switch
		- FTP Cable, Category 5 with connector

Green-125

Green-125 Pressure Monitoring
- Able to mount digital pressure gauge
- Cylinder pressure can be monitored and managed remotely
- Prevent fail of extinguishing cause of leakage of agent

Economic
- Agent Filling Rate (27.2kg ~ 66kg)
- Cylinder   (68L & 82.5L)

Reliability
- Cooperation development with **Jensen & Hughes Associates**
- Professional Fire Prevention Design Certificate

Design Excellence
- Maximum Protection Area (per 1 nozzle)   180 ㎡ (13.42x13.42)
- Ratio of Pipe volume to agent volume   220%
- Discharge Time   5.2sec. ~ 10sec.

Product Name		Green-125
Certification Type		가설15-3
Discharge Type		Total Flooding System
Minimum Design Concentration	A,C	8.7%
	B	11.31%
Maximum Permitted Design Concentration		11.5% (When people reside)
Cylinder	82.5ℓ	35kg~50kg (variable charge)
	68ℓ	20.6kg~30kg (variable charge)
Ratio of pipe volume to agent volume		Maximum 220%
Protection Area of Nozzle		180m²
Installation Height of Nozzle		0.3m~4.5m
Minimum Design Pressure of Nozzle		8bar
Discharge Time		5.2sec. ~ 10sec.

Automatic Fire Suppression System

Automatic Fire extinguishing System is installed in small-space such as EPS, TPS to suppress fire early.

High Sensitive
- The fire sensor is early-response glass bulb at 68℃

High Quality
- Use of cylinder valve that agent can be discharged and be interlocked with other cylinder concurrently with operating glass bulb.(patented)

- 2.07m³ protection per agent 1KG. Improvement of minimum 28% in comparison to competitor

- Use of Clean Agent(Personnel safety, No residul) HFC-125

High Safety
- The safety pin is applied to the only our product to prevent accidental agent discharge by busted glass bulb.

- Minimum 30% Reducing weight in comparison to competitor using high-priced aluminum cylinder(WP6.75Mpa)

- Stability Improvement when installing and maintaining product.

Model		DK-951	DK-952	DK-953	DK-954	DK-955
Type		Single	Multiple			
Design Volume	A,C	19.73m³	39.46m³	59.19m³	78.92m³	98.65m³
	B	14.08m³	28.16m³	42.24m³	56.32m³	70.4m³
Protection Area	Min	17.73m² (4.91mX3.61m)	17.73m² (4.91mX3.61m)	17.73m² (4.91mX3.61m)	17.73m²X2 (4.91mX3.61mX2)	17.73m²X2 (4.39mX2.7m)
	Max		17.73m²X 2 (4.91mX3.61mX 2)	17.73m²X3 (4.39mX2.7mX3)	17.73m²X4 (4.39mX2.7mX4)	17.73m²X5 (4.39mX 2.7mX5)
Maximum Installation Height	Multiple	4.5m	8.0m			
	Single		4.2m	4.5m	4.5m	4.5m
Filling Pressure		N2, 25bar@20℃				
Agent quantity		9.5kg	9.5kgX2bottle	9.5kgX3bottle	9.5kgX4bottle	9.5kgX5bottle
Total weight (except support system)		15.9kg	16.1kgX2bottle	16.1kgX3bottle	16.1kgX4bottle	16.1kgX5bottle
PRD,PS interlock		Possible (use of addition device)				
Product Size		Whole length : 729mm(including valve) Diameter : 165mm Cylinder material : aluminum				

NOTIFIER

NOTIFIER

Addressable Fire Alarm Control Panel

- Type : Addressable Fire Alarm Control Panel

- Temperature Range : 0°C ~ 49°C

- Humidity Range   : RH 10% ~ 93%

- Point per Loop : 318
                    (Detector 159 / Repeater 159)

- Maximum Circuit : 10 LOOP 3,180 circuit

- Size : 1165(H)×613(W)×133(D)
          2000(H)×700(W)×500(D)
                    Self-standing type

- Feature : Automatic Programming
             ALK TEST Function
             Fire Alarm 9 stage,
             Preliminary Alarm 9 stage
             Operation of actuator system within 1 sec
             Operation of output repeater within 3 sec

Product Composition

Manual Call Point / Fire Alarm Cable

[Manual Call Point]

- 6 terminal, P-type transmitter
  (DC 24V, KFI Product)
- Manufacturer : VISION ENGINEERING

[Fire Alarm Cable]

- Fire Alarm Cable (UL/FM)
  (TSP AWG18,AWG16,AWG14)
  (T P AWG18,AWG16)
  (1Pair / 3C : ISOTEC product)

Underground Piping Indicator

[Underground Piping Indicator]

- Underground Piping Indicator
- Install Specification : install per below 15m
- Mark of place of business, company,
  pipe route are possible.
- Material : Mixed copper Series
- SIZE : L:100 x H:150 x D:50
- Direction Sign: Four Type