



FIRE PUMP HOUSE UNIT



***PRE-FABRICATED PUMP HOUSE WITH
ALL SYSTEMS
RELATED TO FIRE PUMP OPERATION
PRE-INSTALLED IN IT.***

FIRE

SAFETY

SECURITY

AN INTRODUCTION TO NAFFCO

NAFFCO was founded in Dubai, UAE to become the world's leading producer and supplier of life safety solutions. By recognizing the importance and convenience of having easy access to multiple safety services, we became specialized by offering complete solutions under one roof for all types of high quality firefighting equipment, fire protection systems, fire alarms, addressable emergency systems, security systems, custom-made vehicles such as fire trucks, ambulances, mobile hospitals and airport rescue firefighting vehicles (ARFF).

With the most talented and dedicated employees from around the world, NAFFCO has over 2,000 passionate engineers and over 6 million square feet of manufacturing facilities. We are currently exporting to over 100 countries worldwide.

NAFFCO manufactures UL, FM, BSI & Global Mark approved products in our facility in consistent with International Standards UL-DQS, BSI certifies for the Quality Management System against ISO 9001. Our Environmental (ISO 14001) & Occupational Health & Safety (ISO 45001) Management Systems have been certified by UL-DQS. Our Trucks & Vehicles division has been assessed & certified for Quality Management System requirement for Aviation, Space & Defense organization (AS 9100) by UL-DQS.



NAFFCO
OHSAS 18001 | ISO 14001 | ISO 9001
20002009



FM615437



INTRODUCTION

NAFFCO Fire Pump House Units are designed as per customers' specification and NFPA 20 requirements. Complete fire pump set assembly is fixed inside an intermodal container with all fire pump related standard accessories, valves and fittings and pump testing instruments. In addition to these fire pump set components, the container also includes lighting and necessary fire protection equipment for the pump house such as fire extinguishers. All internal wiring and piping are done at factory and external connectors are provided at the back side of the container that enables easy piping connections and external cable entry provision provided on both sides.

Only high-quality components and fittings are used in order to ensure reliable performance and long life. Only suction and discharge piping, test line return, drain pipe and power input connections need to be made at the field. The complete package is thoroughly tested and inspected prior to dispatch.

ADVANTAGES

- 01 Comparably less project site space requirement
- 02 Pre-connected internal piping
- 03 Eliminates on-site assembly of components
- 04 Easy & Quick field installation
- 05 Heavy Savings in Pump House Construction
- 06 Long lasting pump house enclosure
- 07 In-built auxiliary systems as per NFPA standard
- 08 Superior quality painting of pump house
- 09 Trouble free commissioning
- 10 Convenience in obtaining parts and services
- 11 Certified major components & Wide variety of configurations
- 12 Perfect system operational integrity



TESTED FOR RELIABILITY

***PUMP PERFORMANCE TEST
ENGINE OPERATIONAL TEST
CONTROLLER FUNCTIONAL TEST
PIPING LEAK TEST
PAINTING INSPECTION
OVERALL UNIT INSPECTION***

FIRE **PUMP HOUSE** UNIT COMPONENTS



EXHAUST FAN

Heavy-duty metal exhaust fans are used in tough working conditions where plastic exhaust fans just do not cut it. Metal provides the durability against temperature and extreme conditions such as dust and grim.



SPRINKLER SYSTEM

The sprinklers are provided in the pump house units for faster and automatic fire protection. The sprinklers used in these systems are certified and the system is optimally designed considering the area inside the pump house.



AUTOMATIC DCP FIRE EXTINGUISHER

Automatic Dry Powder Fire Extinguisher is installed in our pump house which is the best designed for use in enclosed places such as these. This system with powerful firefighting capability is fitted with the highest precision release nozzle.



FIRE DOOR & HYDRAULIC HINGES

These steel doors types reduce the spread of fire and enable safe egress. Kraft Honeycomb design provide extreme rigidity and one of the highest flatness levels. This is bonded to the face sheets with fire rated adhesive. Automatic Door Closer with Hydraulic Hinge is fixed on the door which will slowly close and shut the door.

FIRE PUMP HOUSE UNIT COMPONENTS



INTERIOR LIGHTINGS

A weatherproof emergency light is provided in the pump house which will provide light in case of main supply failure. This emergency light provided in the fire pump house unit is weatherproof type design providing longer service life



EXTERIOR LOUVRE'S

Louvers used are provided in the pump house to admit light and air, but to keep out rain and direct sunshine. The total number of these dust proof louvers is decided considering the amount of air flow required into the pump house.



CABLE TRUNKING

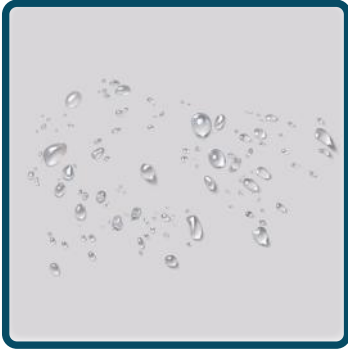
Cable trunking fitted in the pump house provides a neat and efficient means of supporting cables. It protects cables from damage and to hide unsightly cables from view. This rectangular shaped trunking is fixed with screws that can be easily disassembled when needed to access cables as part of any maintenance activity.



CABLE ENTRY

The cable entry provision is provided on both sides of the pump house with sufficient opening size. This avoids the need to cut any entry provision at the field. This round shaped cable entry point is ideally located at a point that has access to the electrical equipment without much hindrance.

FIRE PUMP HOUSE UNIT COMPONENTS



WATERPROOF PAINTING

Pump house container is painted with Polyurethane Topcoat RAL 9010 paint (2 coats of 50 microns DFT each). The surface is cleaned from oil and grease and it is further roughened using emery paper to enhance the adhesion of the subsequent coats.



PIPING CONNECTION

The piping in the pump house which needs external connection has provision for connection on the exterior or side of the pump house. This includes a suction line, discharge line, test line, and pressure relief valve line from the discharge side of the diesel engine driven fire pump if any.



FLOOR DRAIN

The floor drain provided on the pump house facilitates the passage of water out of the pump house. This will also enable the proper cleaning of the pump house whereby the cleaning agent can be drained out of the pump easily.



DIESEL FUEL TANK

Designed and Fabricated in accordance with UL 142 (Steel Aboveground Tanks for Flammable and Combustible Liquids) standard, comes incorporated with drip pan to contain fuel during spill, leakage and maintenance.

The image displays a complex fire pump system with the following labeled components:

- Fire Pump Controllers:** Two large red units labeled "NATIONAL FIRE FIGHTING MFG CO. LISTED FIRE PUMP CONTROLLER EK19064".
- Centrifugal Fire Pump:** A central unit labeled "CENTRIFUGAL FIRE PUMP, END SUCTION".
- Aboveground Tank:** A large blue tank labeled "ABOVEGROUND TANK FOR FLAMMABLE LIQUIDS ON SU... No. CS2280410".
- Main Gate Valve:** A red valve labeled "JRY200FF-D MAIN GATE VALVE TEMP=80°C".
- Check Valve:** A red valve labeled "NRV200FF-D CHECK VALVE TEMP=80°C".
- UL Listing:** A circular callout for "UL LISTED FIRE PUMP CONTROLLER EK19064".
- Fire Driver:** A circular callout for "FIRE DRIVER".

<ul style="list-style-type: none"> • Electric Pump • Electric Motor • Diesel Engine • Diesel Pump • Jockey Pump • Gate Valve - Suction • Gate Valve - Discharge • Gate Valve - Test Header • Non Return Valves (Fire Pumps) • Flow Meter • Internal Exhaust Pipe Line • External cable entry provision • Electric Fire Pump Controller • Diesel Fire Pump Controller • Jockey Pump Controller 	<ul style="list-style-type: none"> • Pressure Sensing Line • Drain Pipe Lines • Pump Shaft Drain • Floor Drain • Battery • Pressure Gauge on Discharge • Header • Fuel Tank with Drip Tray • Fuel Tank Air Vent Pipe Line • Non Return Valve (Jockey) • Gate Valve - Discharge • Suction Pressure Gauge • Discharge Pressure Gauge • Discharge Header • Emergency Light 	<ul style="list-style-type: none"> • Interior Weather Proof Lights • CO₂ - 5 Kg • DCP - 6 Kg • ADCP - 6 Kg • Sprinkler System with ZCV. • Casing Relief Valve. • Ventilation Fans with Louvers • Sand trap Louvers • Suction Pipe Line • Discharge Pipe Line • Complete Internal Conduit Wiring
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FIRE PUMP HOUSE UNIT

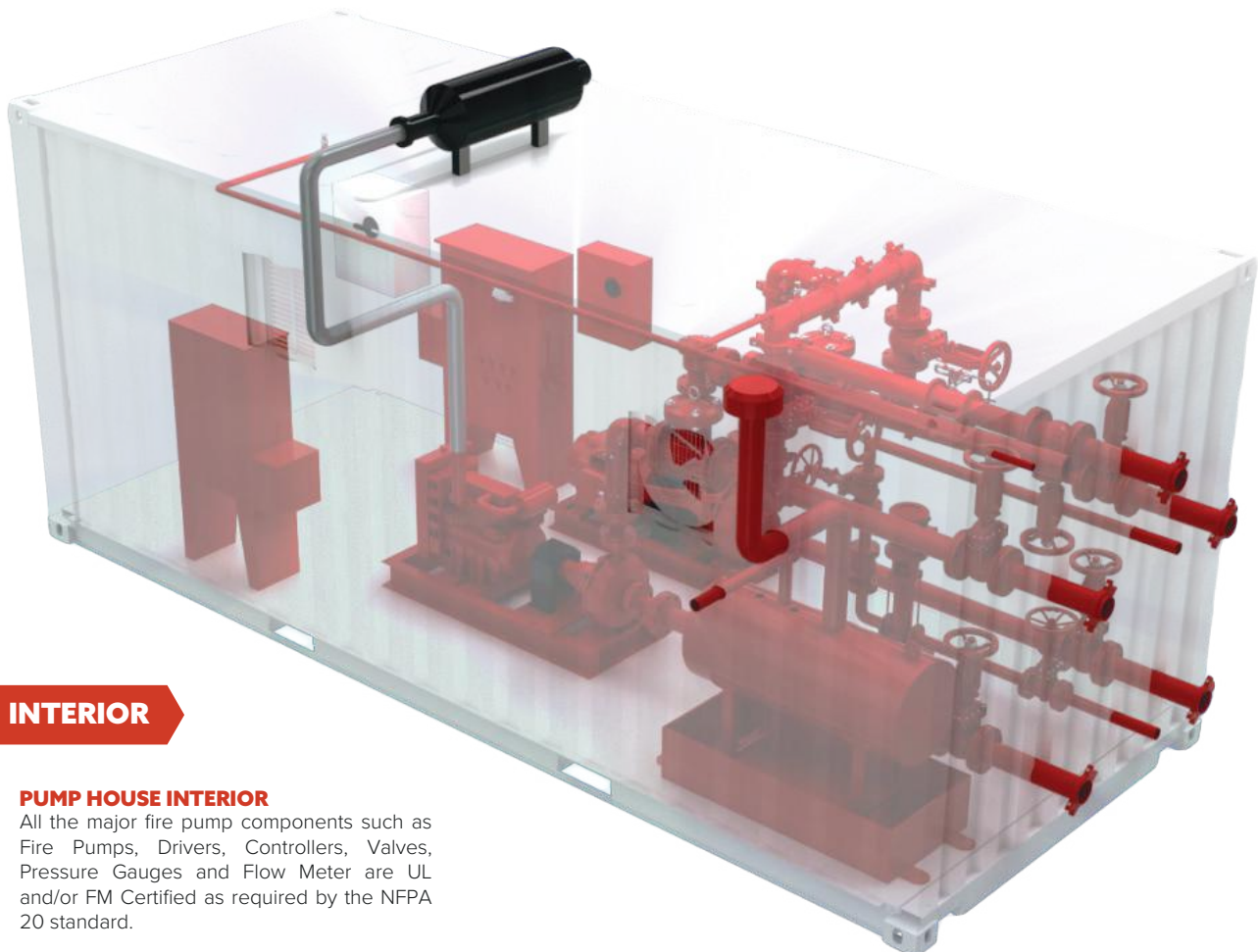
MODEL



EXTERIOR

PUMP HOUSE EXTERIOR

Pump House Enclosure sufficiently protected to be weatherproof with provisions for cable entry and piping connections. The container is provided with a triple coat painting, with bottom part protected with rust proof paint.



INTERIOR

PUMP HOUSE INTERIOR

All the major fire pump components such as Fire Pumps, Drivers, Controllers, Valves, Pressure Gauges and Flow Meter are UL and/or FM Certified as required by the NFPA 20 standard.



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In line with NAFFCO policy for continuous product development,
NAFFCO has the right to change specifications without prior notice.

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