



Electrolab Fire Pump Station

Fire pump station contains diesel driven pump, electric driven pump and jockey pump. It is used in factories to maintain a constant water pressure in pipelines and pump it to outlets when needed. All pump drivers automatically start up when pressure drops.

Fire pump station operation:

Water in pipe lines should be maintained at predetermined pressure, when pressure slightly decreases due to pipe line leakage the jockey pump automatically started to compensate this small leakage, when pressure more drops down due to opening any of the valves or outlets,

the electric motor automatically starts up to operate the fire pump to maintain pressure to its setting point, when pressure drops extremely lower than preset limits in case of fire, the diesel engine automatically starts up to operate the fire pump to maintain pressure at its preset limits. This way the pressure will be maintained in the hydrant irrespective of the flow

The station shall be supplied with

- Jockey pump
- Diesel driven pump set
- Electric driven pump set
- Automatic start up control panel for the system

ELECTROLAB

Dallah building, 7 A Cornaish ELnil, Maadi, Zip Code 11431
 Email: electrolab@electrolabtrucks.com

Tel: +20-2-25285213 (4) (5) (6)

Fax: +20-2-25285212

www.electrolabtrucks.com

Diesel driven pump set

Diesel engine

• Industrial diesel engine, it has a HP rating equal to or greater than the maximum BHP requirement of the fire pump when operating at any point on its performance curve. The operating rated speed of the engine is equal to the pumps rated speed.

- Isuzu engine.
- Power 80 hp at 3000 rpm.
- The engine is water cooled.
- Battery operated starter (option).
- Manual operated starter in case of emergency
- Additional heat exchanger: The radiator water is cooled using part of the pump water without mixing between the two.

So the temperature of the engine remains constant and low. No matter how high the ambient temperature is or the length of time in which the pump is used.

Pump

- Single-stage gear-driven centrifugal pump made by the American company hale.
- Discharge 1890 liters per minute @ 10 Bar.
- Suction flange 5 inch diameter.
- Discharge flange 3 inch diameter.
- Can be used with all water types and foam agents.
- **Impeller:** fine grain bronze, closed type, single suction dynamically balanced.
- **Pump shaft:** heat-treated stainless steel ground to finish size.
- **Pump shaft seal:** maintenance-free, self-adjusting mechanical seal.
- **Priming:** exhaust primer or electric (option).

Electric driven pump set

Electric motor

- The electric motor for the fire pump shall be, squirrel cage induction motor with grease lubricated ball bearings. The locked rotor current shall not exceed the values specified in NFPA 20. The motor shall be wound for 380 volts 3 phase 50 cycles operation with operating speed HP as required by the fire pump.

Pump

- Single-stage gear-driven centrifugal pump made by the American company hale
The same pump as of diesel driven pump.

Control Panel

Every set has this control panel, which has all the gauges and indicators needed for operation and it provides complete automatic and manual operation of the set.

- Pressure gauge for suction and discharge.
- Automatic start up control.
- Working hours meter
- Accelerator
- Warning lamps
- Priming controller
- RPM

The control panel and its contents are sealed against water leakage

Jockey pump:

Is used to maintain pressure in the fire protection system at all times. These pumps compensate for small leaks in the system and prevent the main fire pump from cycling they also help prevent pressure surges when the main fire pump is started. A jockey pump package consists of a pump, motor and controller. The jockey pump controller shall incorporate a magnetic starter. The unit shall be completely wired and assembled in a suitable enclosure with access door.

ELECTROLAB

Dallah building, 7 A Cornaish ELnil, Maadi, Zip Code 11431
Email: electrolab@electrolabtrucks.com

Tel: +20-2-25285213 (4) (5) (6)

Fax: +20-2-25285212

www.electrolabtrucks.com