

FIRE PUMP SYSTEM STANDARD PREVENTATIVE MAINTENANCE

Coverage:

Coverage includes one scheduled inspection on the above equipment which is recommended twice per year. Each visit includes labor for one technician. All parts and applicable sales tax are **excluded**. Any additional work beyond the contracted four hours of labor will be billed at our standard Time & Material rate. System must be called out by site personnel before any work can begin.

This service will renew automatically unless cancelled by the Customer or STH within 30 days of renewal date.

STH AGREES TO:

- Perform a simulated emergency to check the proper automatic operation of the equipment.
- Drop the pressure on the discharge side of the pump.
- Insure pressure switch initiates fire pump operation.
- Interrupt the primary power source to check automatic transfer switch operation (if applicable).
- Insure sensors bring on the emergency power (if applicable).
- Restore pressure to discharge side of pump to check proper automatic shut-down.

Jockey Pump:

- Check performance of pump.
- Check and record amperage draw.
- Test pump pressure.
- Check and adjust proper "on-off" pressure settings.
- Record pressure settings.
- Check for leaks in the mechanical seals.
- Check motor bearings and lubricate as necessary.
- Confirm check-valve(s) are holding properly.
- Check casing relief valve operation.
- Check how often jockey pump comes on.

Fire Pump:

- Check performance of pump.
- What is the "churn" pressure?
- Record pressure settings.
- Check and adjust proper "on-off" pressure settings.
- Check pump/motor coupling and alignment.
- Check pump/motor mounting and bolts.
- Check and adjust packing.
- Check drip cups.
- Check bearing temperatures and lubricate as necessary.

Fire Pump

- Check and adjust relief valves.
- continued:
 - Check minimum run timer settings.
 - Check casing relief valve operation.

Controller(s):

- Check start relays for chattering.
- Verify the voltage on all three phases if there is a display. If no display, there will be an adder of \$500 due to arc flash safety to verify.
- Operational check of automatic start and manual start.
- Check operation of alarms.
- Check all electrical connections if there is means of disconnecting.
- Check all status lighting.
- Check mechanical condition of emergency run handle, locks, and switches.
- Check auto transfer to and from emergency.
- Check on Joslyn Clark units; the start/run transition.

Diesel Engines:

- Check fuel tank and supply lines.
- Check antifreeze condition and freeze protection temperature.
- Check oil condition and level.
- Check battery condition and electrolyte level.
- Check engine mounting for condition and security.
- Check exhaust system for condition.
- Check engine for:
 - Correct operating speed.
 - Operating temperature.
 - · Correct oil pressure.

System Connections:

- Verify that ALL suction valves are properly set.
- Check piping connections and general condition.
- Check all wiring for condition and tight connections.
- Check for restricted unions in both JP & FP. Are they installed horizontally?