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POSITIVE DISPLACEMENT FOAM PUMP RETROFITS

Positive displacement foam pumps used in fixed and mobile firefighting systems, each have unique considerations when the pump manufacturer and/or model numbers need to be updated or changed. With the removal of PFAS containing foams in the market and replacing them with higher viscosity, Fluorine Free (SFFF) type foams, the pumps that are currently installed in the system may not adequately perform as designed any longer.

Fire Lion Global has unique perspectives with multiple brands of firefighting foam pumps other than Fire Lion Global. Our knowledge and experience with most brands on the market today put us in a very promising position as your partner and solution provider for any retrofit you may see yourself providing.

The following list are just some of the engineering considerations that must be considered when performing any positive displacement retrofit.

- Firefighting foam agent type, i.e. AFFF, AR-AFFF, SFFF, etc.
- Suction piping sizes and design.
- NPSHa calculations on current design and future design per NFPA 20.
- Stainer basket hole sizing.
- Pump driver details, i.e. electric motor, diesel engine, hydraulic motor, PTO, water pelton wheel.
- Horsepower requirement of current system and retrofit system
- System demand for foam concentrate flow rate and pump pressure rating
- What listings and approvals are required currently and what will be required after the retrofit
- Pressure Relief Valve (PRV) installation and required set pressure
- Pump connection size differences
- Pump dimensional differences between old and new pump models/manufacturers
- Detailed controller information with options needed for installation location/conditions
- Pressure sustaining valve (if applicable) adequacy.

As each project has specific requirements and installations, this list could be expanded with other considerations as well. Pictures of all equipment, nameplates, piping designs and overall system installation would also be HIGHLY recommended.

Please reach out to Fire Lion Global with any questions you may have for assistance with any retrofit of all firefighting PD pumps in the industry today.

FOAM PUMP INFORMATION:**Project Name:** _____**Project Location:** _____**Electric** **Diesel** ***Pump Controller Information*****Manufacturer:** _____**Model #:** _____**Serial #:** _____**Nameplate Picture:** Attached Not Available ***Pump Information*****Manufacturer:** _____**Model #:** _____**Serial #:** _____**Flow rate:** _____**Pressure:** _____**PRV Size:** _____**Coupling Type / Model:** _____**Nameplate Picture:** Attached Not Available ***Pump Driver Information*****Manufacturer:** _____**Model #:** _____**Serial #:** _____**Rated HP (kW):** _____**Enclosure:** _____**Power Supply:** _____**Special Options:** _____**Nameplate Picture:** Attached Not Available