STEADY STATE FUEL SYSTEMS

Diesel Generator Fuel Conditioning and Delivery System Submittal
Model: SSFTR-SFR-D5-L-CPU
Specification Section: 23 09 23

Product Description

The Steady State Fuel Systems SSFTR-SFR-D5-L-CPU is a factory-assembled, skid-mounted diesel fuel conditioning and delivery system designed for emergency and standby generator applications. The system provides continuous fuel circulation, filtration, thermal management, monitoring, and alarm annunciation during generator runtime and non-runtime fuel polishing cycles, without interrupting generator fuel supply.

Basis of Design:

Manufacturer: Steady State Fuel Systems, LLC
Model: SSFTR-SFR-D5-L-CPU
Capacity: Duplex 5 GPM Pumps
Compliance: NFPA 110, UL 508A, ISO 4406

System Components

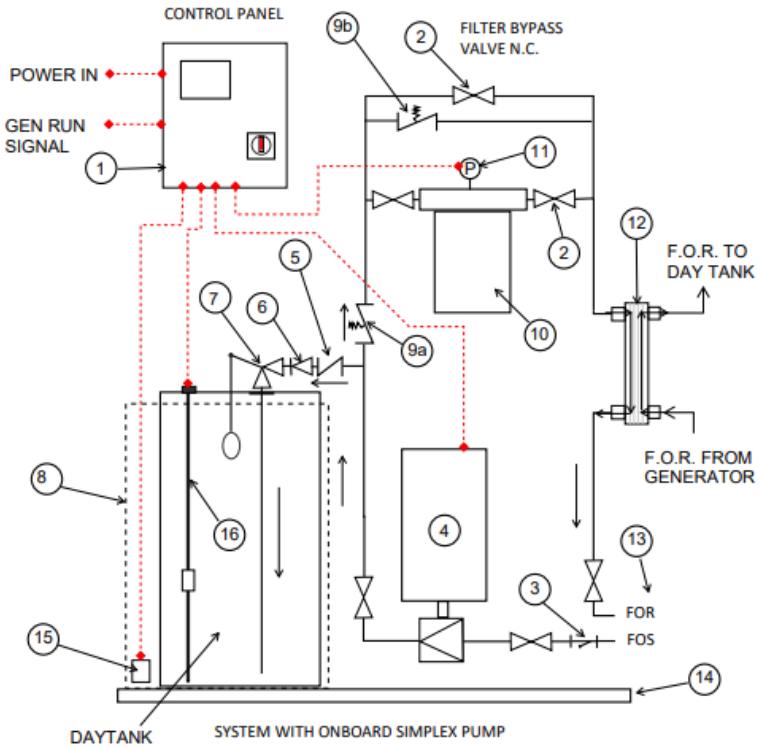
- UL-508A listed PLC-based control panel with touchscreen HMI
- Duplex stainless steel rotary vane pumps (5 GPM each, lead/lag)
- Continuous duty TEFC motors
- Two-stage high-efficiency fuel filtration
- Stainless steel plate-type crossflow heat exchanger
- Integral 14-gallon reservoir with rupture basin
- Leak detection and differential pressure monitoring
- Isolation valves, check valves, and flow restrictors

Install Requirements

Secure the skid using wedge or epoxy anchors to concrete pad.
Power requirements: 208/230 VAC dedicated single phase circuit.
Control circuit: Dry contact for generator run signal.

STEADY STATE FUEL SYSTEMS

Figure 1



Sequence of Operation

1. Generator run signal initiates system operation.
2. Fuel is drawn from the main storage tank and filtered.
3. Fuel flows to generator; excess fuel returns via filtration and heat exchanger.
4. System monitors fuel level, pressure, and leak conditions.

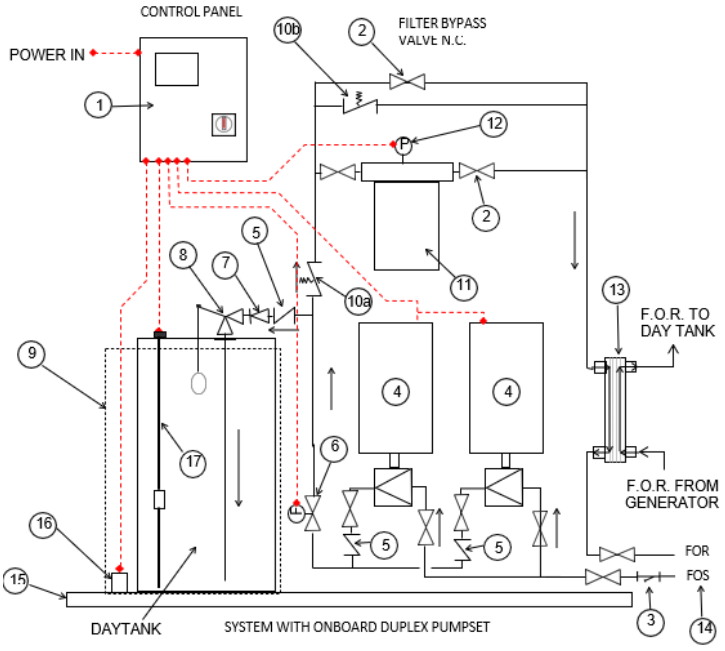
Warranty & Quality Assurance

Factory assembled and tested prior to shipment. Manufacturer's standard warranty applies.

Controls & Electrical

PLC-based UL-508A listed control panel with automatic pump sequencing, fuel level monitoring, filter differential pressure alarms, leak detection, and BACnet/Modbus communications capability.

Figure 2



Specifications

Weight	367lbs.
Dimensions Length x Width x Height	36" x 28" x 72"
Finish	Blast and RAL-7015 powder coat finish
Welded Frame	1/8" mild carbon steel

Specification Section: 23 09 23
Email : info@steadystatefuelsystems.com
www.steadystatefuelsystems.com