Fueltec Systems LLC
PO Box 70
Morganton, NC 28680
TEL: 828-212-1141

SPECIFICATION MODEL CF5.0-UL-PCB-PANEL-100027 v_1.5

Automatic 5 GPM Fuel Polishing System with Pre-Filter

1) Design: 300 GPH fuel polishing system for one diesel fuel storage tank

- Complete factory-assembled automatic particulate filtration, water separation and removal system to maintain the purity of No. 2 fuel oil held in extended storage. The system shall circulate the oil from the storage tank, through the system, removing water and particulate matter, then returning the clean dry fuel back to the storage tank.

- The System shall exceed diesel engine manufacturer's cleanliness target of ISO 18/16/13. Water removal to less than 100 PPM

- The system shall separate free and emulsified water from diesel fuel with a military type micro-glass coalescer/filter and hydrophobic water separator within a stainless steel top loading housing.

- System shall have a PCB controller that schedules system operation with alarms and sensors that automatically indicate filter conditions, presents of water in trap, and fluid leak.

- Industrial electric control panel shall be Underwriters Laboratory 508A and CE Listed

- System shall be installed with supply and return piping that is exclusive to the system and independent of any other piping to or from the storage tank(s). System supply piping shall extend to contact the storage tank bottom and be designed to maintain contact with the storage tank bottom to extract even small droplets of water.

2) The filtration system shall consist of but not limited to the following components:

a)

b) Five stage filtration and water removal

i) First stage particulate filtration three (3) micron spin-on type

ii) Second, third, and forth stage filter/coalescer within a stainless steel housing:

a. treated cellulose particulate filter
b. micro-glass coalescer (mil jet fuel type)

c. hydrophilic cloth wrap.

iii) Fifth stage water separator Teflon coated stainless steel

c) Fuel circulation pump bronze 5 GPM w/pressure relief 115/230V 1PH 50/60Hz

d) Stainless steel separated water trap one gallon capacity w bottom drain valve

e) Valves: supply and return valves shall be 1" ball valves, drain ½" ball valve

f) Sensors:

i) Vacuum sensor transmits condition of first stage filter to HMI/PLC

ii) Pressure sensor transmits condition of filter/coalesce to HMI/PLC

iii) Water sensor transmits high & low water levels in water trap

g) Electrical:

i) Industrial Control Panel Underwriters Laboratory UL-508A and CE listed

ii) Power required: 115AC 1PH 50/60 Hz 20A

iii)Electrical Enclosure NEMA 4X

iv) Voltage: high 115AC, low 24DC

h) Controller: PCB

i) Operation: on 3 hours then off 21 hours

ii) Alarms:

(1) High water in trap

(2) High vacuum (service primary filter)

(3) High pressure (service final filters)

(4) Fluid in system sump

(5) No fluid flow