



### Automated Fuel Maintenance System

The ACS Fuel Maintenance System (part number FMS-4.7) is a fully automated, stand-alone, self-contained system designed for tanks up to 6,400 gallons. It cleans and reconditions stored fuels, eliminating the problems associated with the water, sludge and other contaminants that develop in fuel storage tanks over time. The system's automatic cleaning program will provide a constant clean fuel supply that will assure the reliable operation of your emergency power unit whenever it is needed.

The FMS-4.7, operated by a 6" color touch screen PLC/HMI controller, will periodically circulate your stored fuel through a series of water removal and particulate filters that remove 99.7% of free water and 99.5% of particulate contaminants. It will keep your stored fuel in clean, like new condition, preventing clogged engine filters, injection system repairs and the need for periodic fuel replacement or tank cleaning due to fuel contamination and the resulting degradation.

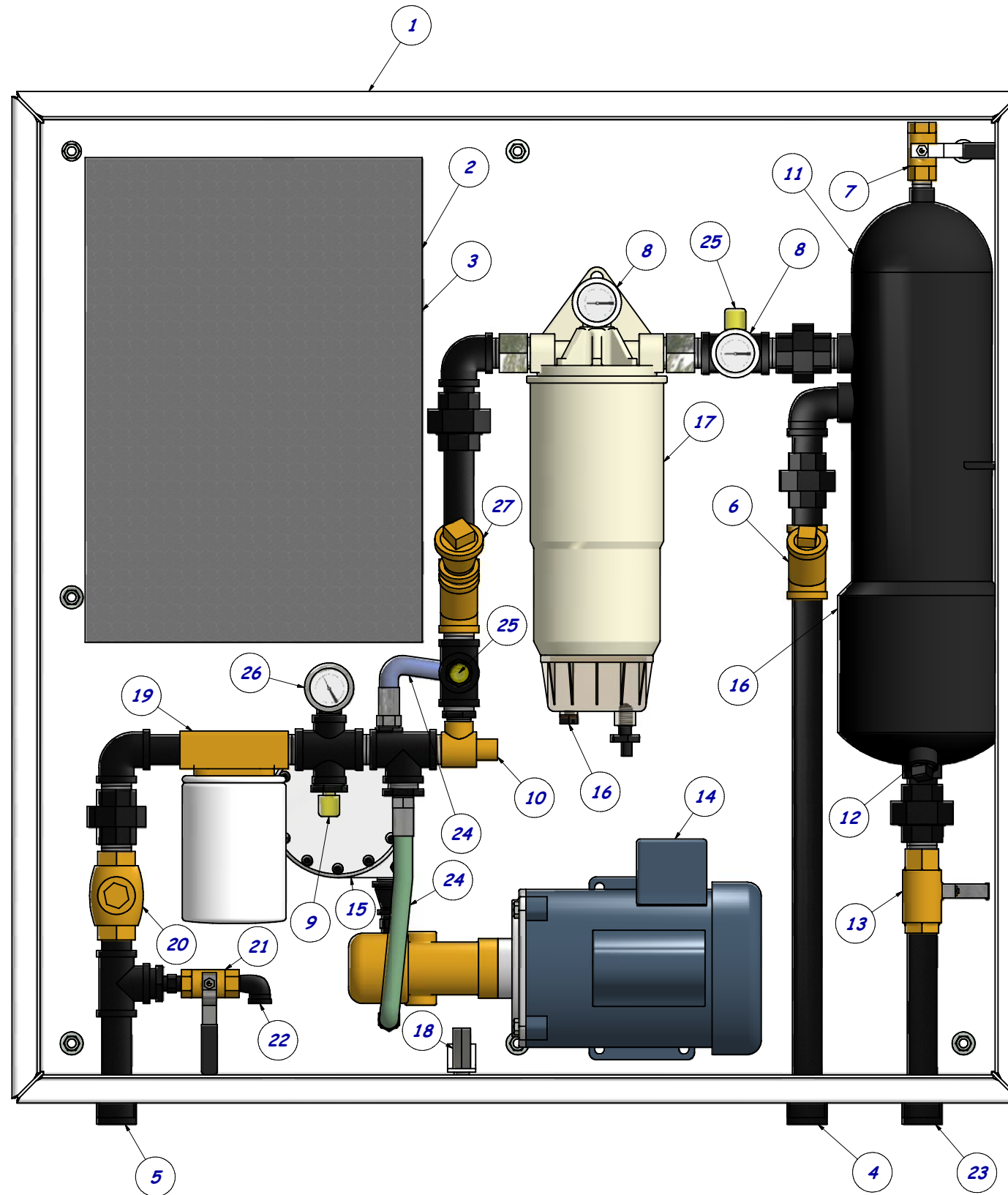
The system is fully monitored and alarmed for safety. Alarms can be sounded at the unit or communicated off site via a MODBUS (RS 485) serial and Ethernet TCP/IP connection. Two (2) dry contacts for pump running and common alarm are available for customer use. The system will alarm and can be shut down automatically for any or all of the following conditions:

1. Hi-pressure at the primary and final filters, indicating a filter change out is needed
2. Hi-vacuum at the water separator, indicating the separator needs service.
3. Hi-water in the separator, indicating the need for it to be drained.
4. Equipped with an in-cabinet drip tray, a leak detector in the tray will sound an alarm and shut the system down on detection of any liquid, which may indicate an internal system leak.

Incoming power requirements: 120 VAC, 1 Phase, 30 Amp Circuit

Additional Features:

- UL 508A Labeled Control Panel
- Push button emergency stop located on the outside of the cabinet (remote mount is optional)
- 3 Position selector switch, Pump-Hand / Off / Auto
- Control logic short circuit protection, 1 A / 1-Pole



PARTS LIST	
ITEM	DESCRIPTION
1	BOX - 36" X 36" X 12"
2	FUEL MAINTENANCE CONTROLLER - (U.L. 508A)
3	6" TOUCH SCREEN - (PLC-HMI)
4	FUEL IN - 3/4" FNPT
5	FUEL OUT - 3/4" FNPT
6	"Y" STRAINER
7	PURGE VENT BALL VALVE
8	VACUUM GAUGE
9	PRESSURE SWITCH
10	PRESSURE RELIEF VALVE
11	WATER & PARTICULATE SEPARATOR, COALESCING
12	HEATER PORT - (HEATER NOT INCLUDED)
13	WATER FILTER DRAIN BALL VALVE
14	1 H.P. MOTOR W/ 4.5 G.P.M. PUMP
15	MAGNETIC FUEL CONDITIONER
16	WATER SENSOR
17	SECONDARY WATER REMOVAL SEPARATOR
18	FUEL LEAK SENSOR
19	2 MICRON FINAL PARTICULATE FILTER
20	VERTICAL CHECK VALVE
21	FUEL TEST SAMPLE BALL VALVE
22	FUEL TEST SAMPLE DISCHARGE
23	WATER FILTER DRAIN - 3/4" FNPT
24	FLEX HOSE
25	VACUUM SWITCH
26	PRESSURE GAUGE
27	1" FNPT PUMP PRIMING PORT

QUOTE #:   
 PROJECT: ACS-FMS 4.7



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SCALE: 1/4" = 1'		CHECKED BY: PM
DATE: 1/19/10		APPROVED BY: PM
		SHEET REVISION
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