

BFS Industries, established in 1946, has concentrated its efforts in the design and manufacture of fuel oil transfer, maintenance and conditioning systems. Many things have changed over the years such as concern for the environment, government regulations and the demand for more automation, safety and reliability. **BFS engineeers have not only met these criteria but gone beyond to set new, far reaching standards.** 

Complementing our mechanical engineers are the capable electrical engineers of our *Controls Group*. They provide the in-house electrical technology and assembly expertise for motor control plus any level of monitoring, automation and alarm functions desired.

It is this experience and talent that assures our clients of a complete, fully integrated, "state of the art" system.



Typical Total Fuel Maintenance and Conditioning System (Control and Information Center See Page 3)

- 1. Rupture Basin
- 2. De-watering holding tank
- 3. Hand pump
- 4. Biocide chemical storage
- 5. Fill valve with cast iron funnel
- 6. De-watering pump
- 7. Chemical pump
- 8. Duplex strainer bubble tight shut-off under vacuum
- 9. Containment basin leak detector and alarm switch

- **10.** Liquid filled gauges
- **11.** Electronic water detection module
- **12.** Fuel circulating pump
- **13.** Automatic air vent
- **14.** Separator / coalescer filter
- 15. Flow switch
- **16.** Particulate filter
- **17.** Differential pressure switch with gauge
- 18. Lifting eyes

# Typical Fuel Management Control and Information Center

- Motor controls and monitoring of remote transer pumps
- Motor controls and monitoring of particulate filtration pump
- Motor controls and monitoring of biocide chemical pump
- Motor controls and monitoring of de-watering pump
- High level alarm for water tank (separator/coalescer waste)
- Biocide tank low level alarm
- Automatic daily diesel flow test
- Remote fill station alarm
- Dirty filter alarm
- Central panel alarm message displays



#### **Typical Fuel Transfer System**

- Heavy duty rotary pumps with VITON seals
- Duplex strainer bubble tight shut-off under vacuum conditions
- Containment basin
- NO-flow switch
- Differential pressure switches
- Suction isolating valves
- Discharge isolating valves and check valves
- Relief valves
- Priming tee with valve and cast iron funnel
- Liquid filled pressure and compound gauges
- Leak detector and alarm switch
- Motor control and alarm center



#### Typical Day Tank with Rupture Basin

- Multi-function level/alarm switch
- Leak detector and alarm switch
- Manual fill connection with shut-off valve and cast iron funnel
- Level gauge
- Inspection opening with cast iron cover plate
- Valved drain



### VALUE ADDED FEATURES

- Heavy duty rotary type pumps (diesel/#2/#4 oil)
- Flexible coupled permanently aligned
- VITON mechanical seals
- Heavy duty duplex strainers
- **Ball** valve for bubble tight shut-off even under **vacuum**

- Pump Control / Level Alarm Switch
- Rugged construction
- ALL stainless steel
- UL approved
- Exceptional versatility
- Multi-function capable

## • **Independent** particulate and separator/coalescer filters

- Efficiently filter fuel first and then
- Effectively separate and coalesce water
- Particulate filter will remove contaminants down to 2.8 microns with 98.7% efficiency
- Separator/coalescer will reduce a 5000 PPM concentration of water to 5 PPM













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