Fuel Oil Systems

- Pump Sets
- Day Tanks
- Filtration Systems
- Accessories

For Facilities That Cannot Stop!
**Pump Sets**
- Multiple Sizes and Pressure Ratings
- Simplex or Duplex Pump Sets
- Pump Isolation Valves with Check Valves
- Simplex or Duplex Strainers
- Suction and Discharge Pressure Gauges
- Positive Flow Indication
- Base Pan Leak Alarm
- Clogged Strainer Indication
- Custom Control Systems

**Applications**
- Diesel Supply to Emergency Generators
- Oil Supply to Boilers for Primary or Backup Fuel Supply

**Day Tanks**
Any size, from small 100 gallon boiler transfer tanks to large tanks sized to handle the largest emergency generator.
- Double Wall or Single Wall with Rupture Basin
- Leak Indication
- Multi Level Switch Control of Pumps
- Continuous Level Indication
- Return Pump for Safety and Flexibility
- Locally Mounted Control Panels

**Applications**
- Local Oil Storage For Generators or Boilers
- Oil Transfer
- Emergency Return or Hot Oil Return Applications
**Filtration Systems**

Filtration systems can also be referred to as “Polishers”. They are used for two functions, first to clean the fuel and second to enhance the fuel.

- Pump sized to filter your tank(s) in an 8 hour shift
- Remotely mounted or next to the tank(s) being filtered
- Chemical injection pumps to enhance fuel as fuel is cleaned
- Completely automatic operation
- Leak and low chemical level indication

**Applications**

- Used anywhere that large amounts of fuel is stored which may remain in storage for more than a year
- Oil stored over time will lose its Cetane rating and degrade due to microbial growth

**Accessories**

In addition to the above basic building blocks to a complete fuel oil system for you facility, we also provide the following:

**Fill Manifolds:** Automatic control valves will select which day tank will be filled in multiple day tank applications. Pre-piped assemblies include a solenoid valve with isolation valves with optional backup solenoids, check valves, flow switches, sight flow indicators, flow meters and throttling valves.

**Tank Accessories:** To meet local codes and the requirements of the application, additional items are available to complete the day tank installation. This includes vent caps, manual gauges, level switches, continuous level transmitters and, temperature transmitters. Industrial Fuel System supplies all the required items preassembled to the day tank so all that is required is pipe connections and field wiring as needed.

**Strainers:** Simplex and duplex strainers are available to protect the pumps and to provide the first level of filtration in a filtration system.

**Valves:** For systems requiring control of the oil flow, solenoid valves or motorized valves are used. Motorized valves are used on more complex systems, and typically include end switches.

**Fill Stations:** For receiving oil from delivery trucks, fill stations can be as simple as a ground mounted box in the pavement to wall mounted fill boxes connected to the tank. A live display of the current tank level can be provided as part of the fill station along with alarms to alert the delivery person that the tank is full. Several tanks can be filled at a single fill station with the use of a tank selector switch.

**Back Pressure Valves:** In applications where the pressure in the supply line will need to be controlled (such as boiler loops) a back pressure valve is used. These valves can come with complete assemblies that allow for bypass valves and pressure gauges.

**Fire Valves:** Specialized valves are used to protect facilities in case of fire. Valves are spring loaded with a fusible link that will melt at 165 degrees. These will stop the flow of any additional oil into a room experiencing an emergency.

**Our Services**

Industrial Steam takes a total fuel system approach to your application requirements. We provide the following:

- **Conceptual System Design**
- **Detailed System Design and Sizing**
- **Overall Project Management**
- **Manufacturing**
- **Startup**
- **Commissioning Assistance**
- **Documentation**
- **Training**
- **Consulting & Support**

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**Typical Fuel Oil System Layout**

Fuel oil systems can be as simple as a single main storage tank pumping to a day tank, or they can be complex, involving several pump sets with day tanks for any number of generators located on any number of floors in a building. They can involve separate pump sets for boilers that may be located on the upper floors of a tall high-rise building. As the amount of fuel stored on site increases, the need for filtration grows. Most systems will have to communicate to a building automation system and may involve a network of controllers.