

**Fuel Filtration/Separation  
and  
Protection for Diesel Powered Generators**

<b>Potential Users</b>		
Municipalities	Insurance Companies	Telecommunication Firms
Information & Data Centers	Health Care Facilities	Technology Companies
Power Companies	Airlines	Financial Institutions
Corporate Centers	Oil Companies	Federal Agencies
Educational Facilities	Utilities	Prisons
<b>The Problem</b>		

The reliability of the Standby Diesel Generator becomes the most critical concern when there is a utility power loss. Water, dirt and other contaminants adversely affect performance of generators which are to be relied upon in emergency situations. It is quite common in today's market for purchasers to buy fuel that is contaminated by water from condensation or by particulates from inadequate transportation and storage. Such contamination affects all diesel-powered equipment as diesel acts not only as a fuel but as a coolant and lubricant for injection-system parts.

Water is heavier than diesel fuel and the two will separate if the storage container remains relatively unagitated (as in standby applications) for a period of time. After separation, water will displace the diesel fuel as a coolant and lubricant for generator components, often causing rapid wear and seizure.

Water entering the combustion chamber can result in additional damage, the heat of the chamber causing the water to turn to steam which can explode the tip of the injector.

Removing water is vital not only to improve combustibility, but also to prevent corrosion in tanks, lines and injectors. Such corrosion contributes to fuel deterioration by enhancing the environment for bacteria, which feed on nitrogen, sulfur and iron oxides.

**The Solution**

Fuel filtration/separation systems provide the critical reliability needed in times of utility power failure and assure that the fuel source will not cause the standby diesel generator to malfunction. Self-contained fuel recirculation systems and centrifugal separation systems are designed to maintain the quality and purity of stored diesel fuel and can be designed to remove water and contaminants down to 2 microns in size and the capacity to service storage tanks up to 25,000 gallons. Please contact us for design and product application assistance.