

# DIESEL FUEL CLEANING

*"Most Customers Spend Thousands of Dollars on purchasing and maintaining their equipment, but neglect to give the same care and consideration to one of the most critical systems required for optimal operation – The Fuel"*

Introducing a way to safely recover, recycle and reuse your diesel fuel

Keeping diesel fuel storage tanks and diesel fuel clean is one of the most important preventive maintenance functions to be performed. Dirt, water and oxidized diesel fuel accumulate in the form of sludge in the bottom of fuel tanks. The problem is compounded when the dead microbial growth adds to the layer of sludge. Once this sludge reaches the fuel pickup it will stop your operation. Correcting the problems after this occurs will cost thousands, if not hundreds of thousands of dollars. Scheduling a cleaning for your in-house service staff with the Vanjen Group is the most cost effective solution. Our high speed centrifuge will efficiently and quickly remove sludge and water from stored fuel and oil, while causing no time down issues to your critical equipment. These systems are designed for high capacity industrial fuel polishing that restores your fuel to new condition.



## **BENEFITS:**

- Prevents thousands of dollars in potential repair costs
- Prevents critical engine down situations when customer needs it the most
- Optimal fuel quality at all times
- Prevents costly fuel disposal and replacement
- Eliminates the need for expensive additives
- Increases filter replacement interval
- Increases engine life
- Improves fuel efficiency, combustion & stability
- Reduces smoke and emissions

## Filtration Process

The mixture continuously enters the Super-Centrifuge through an inlet at the base of the machine, into the hollow cylindrical rotor. The rotor turns at 15,000 rpm and generates a centrifugal force in excess of 13,000 times the force of gravity.

This force separates the liquids according to their specific gravities into concentric cylindrical layers while the solids are deposited against the rotor wall.

The separated liquids are continuously displaced upwards by the incoming mixture, and discharged through their respective outlet ports at the top of the rotor. The layer of accumulated solids that builds up on the rotor wall is cleaned out when the centrifuge is shut down.



Disk Stack



Solids in Bowl

### Scenario:

The generator fuel tank has been topped off. The load bank test has successfully been performed. Your generator set is ready to come on line in an emergency. Then...you lose utility power. Your system functions just as designed; your generator set is up and critical loads are transferred within ten seconds. As the outage wears on, a low fuel level is indicated and re-fueling becomes necessary. A fuel truck is dispatched, arrives, and begins to fill your tank. The new fuel being pumped into the tank stirs up all the accumulated sludge, water and sediment on the bottom of the tank. It is pulled in through the supply line and within minutes your system shuts down. It is quickly determined that there is mass restriction in the fuel supply line. There are three options at this stage to keep your unit on line continually replace filters as the unit shuts down, wait for the sediment to re settle, or find an alternate fuel source.

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