

Carbon Fuel Services, LLC

P.O. Box 343
Cherryville, NC, 28021
(704) 419-9939



FuelTec Systems

1052SS-UL Automated Permanent Fuel Polishing System

Fuel Filtration and Maintenance to ISO 18/16/13

- For Generator Base and Sub-base Tanks, Above Ground & Underground Fuel Storage Tanks.
- Touch Screen/PLC Based Controller for One To Four Indoor or Outdoor Fuel Storage Tanks.
- Filtration and Water Removal to Engine Manufacturers Recommended Cleanliness Levels.
- Low Cost Replacement Filters.



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The primary sludge filter first removes heavy particulates, rust, bacteria, and fungi with low cost disposable filter bags.

Polishing Systems without a primary sludge filter risk prematurely clogging water separators and damaging fuel pumps.

This System maintains a condition to engine manufacturer's recommended cleanliness levels of ISO particle code of 18/16/13 in up to four diesel fuel tanks with a capacity of up to 100,000 gallons.

Fueltec's Systems have a low operating cost.

The Fuel Polishing System is fully self-contained with plumbing and electrical installed; simply connect supply and return piping to your fuel storage tank or tanks and your system is operational.

PLC/HMI Touch Screen Controller:

- Underwriters Laboratory 508A Listed
- Automatically stops the fuel pump for high separator water, filter change required or system fluid leak.
- Controller will operate the system on one to five fuel tanks on a programmable schedule.

Primary Filter:

- The primary filter housing is built from stainless steel to resist harsh chemicals and highly acidic contaminants.
- Filter Media available in one (1), five (5), and ten (10) Micron rated bags.
- Filter does not require back flushing.

Fuel Pump:

- Industrial bronze positive displacement gear pump resists corrosion and is rated at eight gallons per minute, 100% duty cycle.
- Self-priming pump lifts 16 feet and features a 115/230 Volt 50/60Hz 1PH TEFC Motor.

Water Separator:

- Second phase 10 micron pleated filter media



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- Third phase Micro-Glass (jet fuel type) Coalescer removes tiny water droplets of free and emulsified water from fuels by causing the droplets to grow larger until contained in a water trap.
- The fourth phase utilizes a water repellent Teflon screen to keep the water from flowing with the fuel.
- The water is removed to less than 100 parts per million as recommended by engine manufacturers.
- This process does not require the use of costly water absorbing (water blocking) filters.

System Enclosure:

- System components are housed in an aluminum rain tight enclosure with a lockable door.
- Enclosure sump is equipped with fluid leak alarm that shuts down the system if a leak should occur.

System Options:

- Installation kits for above ground and underground tanks with stainless fluid pickup tubes and tank entry flanges and fittings.
- Heated enclosures and accessories for installation in freezing locations.
- Multi-tank systems are plumbed and pre-wired for easy installation.

Sizing Your Fuel Polishing System:

Water and most fuel contaminants are heavier than fuel and will settle in a lower phase on the tank bottom.

Contrary to some beliefs; Testing has proven that this lower phase may only be 10-25% of the tanks content.

The upper phase of 75-90%; if left undisturbed will remain clean and relatively dry.

Therefore a properly designed system will remove this bottom phase of water and contaminants without mixing with the clean upper phase fuel.

The 1052SS-UL is a **480 GPH** (Gallon Per Hour) System.

Example "A": Four (4) 20,000 gal. tanks containing a total of 72,000 gal. of product.

To polish 25% of 72,000 gal. = 18,000 gal.

Operating six hours (on one hr. then off three hours) per day will circulate and remove



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contaminates in 20,160 gal. in seven days.

Example "B": Two (2) 12,000 gal. tanks containing a total of 24,000 gal. of product.
To polish 25% of 24,000 gal. = 6,000 gal.

Operating three hours (on one hr. then off seven hours) per day will circulate and remove
contaminates in 7,200 gal. in five days.

Example "C": One (1) 15,000 gal. tank containing a total of 12,000 gal. of product.
To polish 25% of 12,000 gal. = 3,000 gal.

Operating three hours (on one hr. then off seven hours) per day will circulate and remove
contaminates in 4,320 gal. in three days.

