



STS 5000-10GPM protecting critical data center in the US

### Ensures Safe & Reliable Emergency Generator Operation.

The STS-5000 removes water, sludge and prevents tank sediments in stored fuel.

- Four stage water removal and particulate filtration down to 3 micron
- Patented Fuel Conditioner reverses fuel deterioration & polymerization down to submicron levels
- Automated programmable control
- Alarms for high vacuum, filter pressure, leak and water level detection
- Easy installation independent of genset ("kidney loop")
- Stand alone, safe, turn key Solution

Fuel is inherently unstable. It **naturally forms sediments, solids and tank sludge**. Clogged filters, smoke and damage to injection systems are often symptomatic, indicating less than optimal fuel quality that causes engines to be unreliable, smoke, lose power and ultimately break down. Water naturally accumulates in storage tanks due to condensation or leaks in fuel fills and vents. Water and temperature changes create an environment for microbial growth, natural oxidation accelerating the formation of sludge, acids and tank corrosion.

The **STS 5000 Fuel Filtration Systems** are totally enclosed, stand-alone and fully automated. They recondition and stabilize fuel, eliminate & prevent microbial contamination and remove water, tank sludge and contaminants from tanks; preserving the integrity of stored fuel to provide reliable power when ever it is needed.

Implementing **STS Fuel Maintenance Systems** assures **Optimal Fuel Quality & Reliable Engine Performance at all times**. It prevents costly downtime, periodic tank cleaning, replacing out of spec fuel and injection system repairs.



Series	STS 5000				
Flow rates	2GPM	4GPM	7GPM	10GPM	25GPM
Tank Size	< 1,500 gal	1,500-5,000 gal	5,000-10,000 gal	10,000-20,000 gal	20,000-50,000 gal
Port Size	1/2" NPT	3/4" NPT	1" NPT	1" NPT	2" NPT
Power	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz	460V / 60Hz 400V / 50Hz
Weight	~380 lbs	~390 lbs	~450 lbs	~450 lbs	~500 lbs
Dim. (HxWxD)	42" x 68" x 14"	42" x 68" x 14"	42" x 68" x 14"	42" x 68" x 14"	42" x 79" x 14"
LG-X Model	500	1500	3000	3000	3000
Primary Filter	10, 30 or 60 mic	10, 30 or 60 mic	10, 30 or 60 mic	10, 30 or 60 mic	40 mesh
Second. Filter (Water Block)	3 or 10 mic.	3 or 10 mic.	3 or 10 mic.	3 or 10 mic.	3 or 10 mic. (2 elements req.)

\* Not for use with fluids that have a flash point below 100°F (e.g. Gasoline, Alcohol, ...)

**STS 5000 Accessories:** Digital Flow Meter (highly recommended), Rotor Sight Glass, Foot Valve,

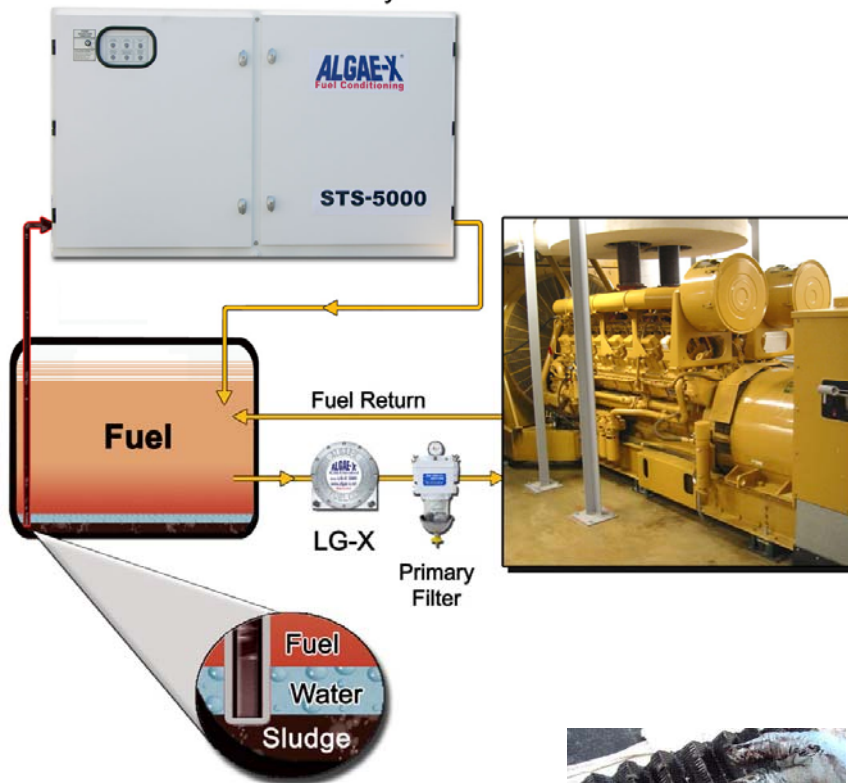
## ALGAE-X<sup>®</sup> Total Fuel Management Systems

The **principal components** are a continuous duty motor with coupled gear pump, strainer/primary filter with vacuum sensor, water separator/coalescer with vacuum gauge and water sensor, Algae-X Fuel Conditioner, and secondary filter with pressure gauge and sensor. The system is automatically operated by a digital timer with memory backup. All components and control devices are installed inside the fully enclosed, lockable, weatherproof NEMA 3R cabinet.

The strainer/primary filter protects the pump, while the separator/coalescer removes water and particulate. The secondary filter is a quick change spin-on filter designed to remove emulsified water and contaminants down to 3 Micron.

For safe operation the **STS 5000** is equipped with a retention basin monitored by a leak detector. Additional safety elements include automatic system shut-off and alarm indication when filter elements require service, high pump vacuum exists or excessive water levels are detected in the separator.

**STS Automated Filtration System**



**Customer quotes:**

*"I had no idea how much sludge accumulated in my tank, putting my emergency power at risk."*  
*"We had to learn the hard way that a clogged filter will shut down the genset – Algae-X provided us with the perfect "Fuel Solution" so this will never happen again."*

**Fuel Maintenance** is an important part of periodic generator maintenance programs – just like changing the oil and ensuring the batteries are charged.

- Do you have a "Fuel Maintenance Program" in place?
- Can you afford a clogged filter shutting down your generator?
- When did you last test your fuel or check the tank for water & sediments?

**Call us to engineer & design your "Fuel Maintenance System"**

**PUMP SELECTOR SWITCH**

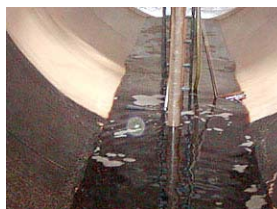
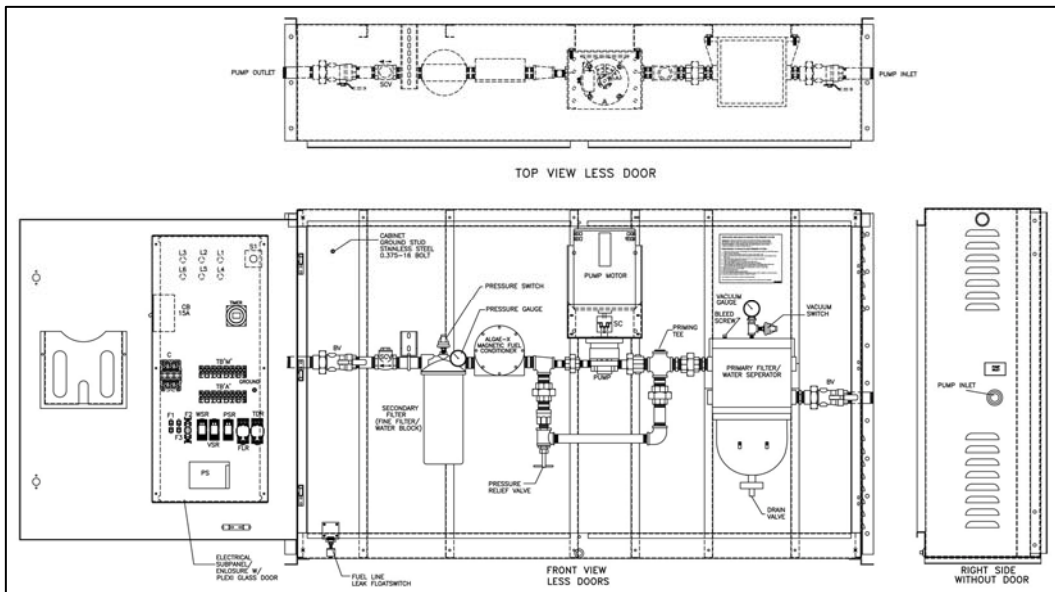
AUTO  
OFF  
RUN

**FUEL CONDITIONING AND FILTRATION SYSTEM**

PUMP CAPACITY 10 GPM @ 50 PSI  
 PUMP LIFT 15 FEET MAXIMUM  
 FLUID VISCOSITY 50-100 SSG  
 PUMP MOTOR 1 HP  
 VOLTAGE 120VAC, 1PH, 50HZ  
 PROVIDE 20AMP SERVICE

POWER AVAILABLE	PUMP RUNNING	FUEL LINE LEAK
SERVICE SECONDARY FILTER	SERVICE WATER SEPARATOR (DRAIN BOWL)	SERVICE PRIMARY FILTER

STS 5000-10GPM - 1" ports



**ALGAE-X® - Optimal Fuel Quality & Reliable Engine Performance**