



**ALGAE-X<sup>®</sup> Fuel Conditioning and Filtration Systems** for emergency generators, stored fuel, oil and hydraulic fluids.

The **STS** is a **Four Stage Fuel Treatment System**:

- Stage 1:** The centrifugal water separation system removes free water.
- Stage 2:** The primary filter removes large particulate and protects the pump.
- Stage 3:** The ALGAE-X<sup>®</sup> Fuel Conditioner reverses the process of fuel/oil deterioration, extends its shelf life and improves system reliability.
- Stage 4:** The secondary filter removes emulsified water and inorganic debris down to 3 Micron.

The **STS 5000-10GPM** is a totally enclosed, stand-alone, wall or pad mounted, Fuel Conditioning and Filtration System providing **Optimal Fuel Quality for Peak Engine Performance**. Since fuel is inherently unstable, solids begin to form and the accumulating tank sludge will eventually clog your filters and damage your injectors. It will cause engines to be un-reliable, smoke, lose power and ultimately break down.

	<b>STS 5000</b>			
<b>Flow rates</b>	<b>2GPM</b>	<b>4GPM</b>	<b>7GPM</b>	<b>10GPM</b>
<b>Tank Size</b>	< 1,500 gal	1,500-5,000 gal	5,000-10,000 gal	10,000-20,000 gal
<b>Port Size</b>	1/2" NPT	3/4" NPT	1" NPT	1" NPT
<b>LG-X Model</b>	500	1500	3000	3000
<b>Power</b>	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz	110V / 60Hz 230V / 50Hz

The **STS 5000** conditions and stabilizes the fuel, eliminates microbial contamination, removes water, tank sludge and contaminants from the tanks. The principal mechanical components of the system are an **LG-X Fuel Conditioner**, a continuous duty motor with coupled gear pump, a primary filter water separator/coalescer with a vacuum gauge and a secondary filter with a pressure gauge. All safety and control devices for remote operation are implemented in an isolated compartment inside the fully enclosed, weatherproof system cabinet.

The **LG-X Fuel Conditioner** decreases the size and mass of fuel droplets which leads to better filtration and water separation, clear and bright fuel, optimal combustion and clean tanks. The **ALGAE-X<sup>®</sup>** unit is self-cleaning, has no moving parts, no electrical hookup, and requires zero maintenance. The primary filter/water separator unit removes water and particulate from the fuel. It can be easily drained, by opening the valve on the bottom. The filter element can be back-flushed several times before replacing. The secondary filter is an easy to change spin-on filter designed to remove emulsified water and inorganic debris down to 3 Micron.

For safe remote operation the **STS 5000** is equipped with a leak proof cabinet that has a sufficient retention area along with a leak detector. Other safety elements are alarms followed by a pump shut-off, if the filter elements have to be serviced or the water separator needs to be drained.

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