

PlasmaGuard STAX™



WE SPECIALIZE IN PURE AIR TECHNOLOGY

PlasmaGuard STAX™ is aware that the most polluted air exists in and around all ocean going vessels from the use of diesel fuels and heavy fuel oils. This makes the technology requirements to purify the air substantially more difficult and necessary. PlasmaGuard STAX™ systems are the permanent exhaust air solutions for marine vessels. PlasmaGuard STAX™ specializes in Micro-WESP™ technology that is easily adaptable into existing ventilation and exhaust stack systems. All ocean going vessels can now purify the internal air for the crew and passengers as well as all exhaust streams to 99.9% efficiency with extremely low maintenance and power costs. All exhaust streams will meet and/or exceed all maritime pollution regulations today and well into the future.

99% +

ELIMINATES HEAVY METALS, MERCURY AND DIOXINS/FURANS

99% +

OPACITY REDUCTION

99% +

SULPHUR REDUCTION

EMISSIONS PERFORMANCE REDUCTION

SOx	>95%
NOx	>50%
CO	>99.9%
H ₂ S	>99.9%
CO ₂	>50%
Dioxins	>99.9%
Furans	>99.9%
TPM	99% (<5mg/m ³)

THE DESIGN

The PlasmaGuard STAX™ system is super high-efficient for all regulated pollutants. Its design is unique and can be scaled up or down to fit your engineering specifications. Requiring little to no maintenance, our system uses only the highest quality metal alloys for superior performance. Our engineers will analyze your requirements and provide you with a complete proposal explaining the detail of our unique approach to save you on capital costs, and most importantly, the operational costs for electrical energy and maintenance.



PLASMAGUARD STAX™ USES NTCP- WESP TECHNOLOGY TO ELIMINATE HARMFUL EMISSIONS.

PlasmaGuard STAX system eliminates harmful particulates from emission streams down to sub-micron (0.1) size by applying an electrostatic charge to the particles. The particles are then destroyed, converted and/or captured for proper removal from the air stream.

Using a high-voltage electric field, our system reduces harmful emission molecules to meet even the most demanding applications. It maintains excellent long-term performance with the ability to effectively achieve greater than 99% removal efficiency, far exceeding other scrubber technologies on the market.



Condensable VOC (oil smoke) will be completely removed and collected.

PLASMAGUARD SOLVES PROBLEMS

This PlasmaGuard STAX™ wet high voltage electrostatic precipitator system is designed to solve the following pollution problems and issues:

- Greenhouse-gases
- Acid rain
- Mercury and heavy metal contamination
- Visible exhaust gas streams

CAPTURES HARMFUL GASES

PlasmaGuard STAX™ systems collect suspended particulate matter by capturing them in liquid droplets. Harmful gases are collected by dissolving and/or absorbing them into the liquid. PlasmaGuard STAX™ reduces the temperature and volume of exhaust gas flow. This reduces the PlasmaGuard STAX™ unit size compared to other control devices. This results in lower capital costs and more flexibility regarding site location of the scrubber.

BENEFITS

- Opacity reduction 99%+.
- Heavy metals, mercury, dioxins/furans removed with 99%+ efficiency.
- Low-cost with ultra-high performance ratios.
- Possibility of carbon offsets and other environmental credits.
- Reduction in total exhaust CO2 at >50%
- Converts CO and CO2 to SO2 to SO3
- Significantly reduces NOx below all required standards globally.
- Low energy consumption to operate.
- Utilize HFO and Bunker C fuels all the way to shore and in port, increasing speed and saving on high ULSD costs
- The best marine engineers and equipment installers in the business for efficient installations.
- Will not exceed back-pressure requirements of engines.

CONTACT INFORMATION

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25 YEAR
WARRANTY