

## INDUSTRIAL APPLICATIONS

# PlasmaGuard STAX™



## WE SPECIALIZE IN PURE AIR TECHNOLOGY

PlasmaGuard STAX™ understands the growing public concerns regarding polluted air from production and daily operations in and around many industrial factories. Because of this, politicians and public opinion have placed the burden directly upon today's businesses to regulate and substantially purify their external exhaust air. PlasmaGuard™ can help. Our system is the best permanent air solution for industrial applications. PlasmaGuard STAX™ specializes in Micro-WESP™ technology that is easily adaptable into existing exhaust stack systems. All industrial applications can now purify external exhaust air distribution to 99.9% efficiency with extremely low maintenance and power costs. Plus, it meets and/or exceeds all of today's pollution regulations.

### 99% +

**ELIMINATES HEAVY METALS, MERCURY AND DIOXINS/FURANS**

### 99% +

**OPACITY REDUCTION**

### 80-85%

**LESS ENERGY THAN CONVENTIONAL METHODS**

### EMISSIONS PERFORMANCE REDUCTION

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

## THE DESIGN

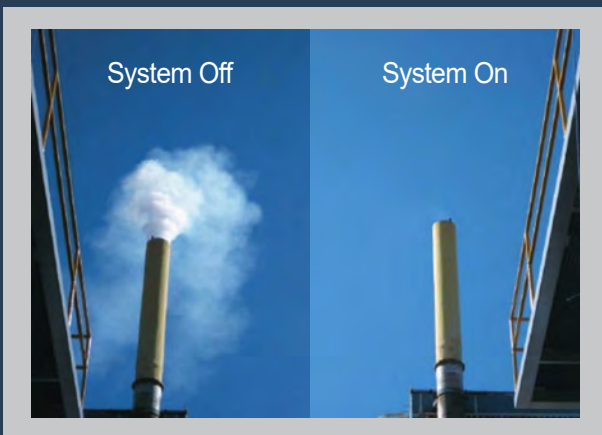
The PlasmaGuard STAX™ system is super efficient for all regulated pollutants. The STAX design is unique and can be scaled up or down to fit almost all engineering specifications. Requiring little to no maintenance, our system uses only the highest quality metal alloys for superior performance. Our engineers 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's will be 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 emission control devices. This results in lower capital costs and more flexibility regarding site location of the STAX unit.

## 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 to CO2 and SO2 to SO3
- Significantly reduces NOx below all required standards globally.
- Low energy consumption to operate. Uses 80 to 85% less energy than conventional methods currently on the market.
- The best engineers and equipment installers in the business for efficient installations.
- Hot gas quenchers
- Low energy Venturi scrubbers
- High energy Venturi scrubbers
- Pack towers for gas absorption
- Marble bed scrubbers
- Wet Electrostatic Precipitators

## CONTACT INFORMATION

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**25** YEAR  
**WARRANTY**