

ADVANCED COMBUSTION SYSTEMS

ENGINEERING
MANUFACTURING
INSTALLATION
SERVICE

INCINERATOR GAS CLEANING SYSTEMS

Enhanced removal of fine particles, acid gases and heavy metals.



THE PROVEN SOLUTION

Today's strict emission requirements can be fulfilled with the appropriate combination of wet scrubbing, filtration and electrostatic technologies. The advantage of the ACS system approach is its versatility. It allows you to select the best combination of technologies to meet your compliance requirements.

THE PROBLEM

Compliance, and the accompanying threat of shutdown, are problems faced by everyone involved in the thermal destruction of waste materials. With the complexity of today's regulations and the importance of on-line reliability, choosing the right system for air pollution control has become increasingly difficult.

STEAM CONDENSATION

For the most demanding applications, ACS integrates steam condensation to provide maximum efficiency, reliability and elimination of the white exhaust plume. Steam condensation also dramatically reduces the volume of gas handled by the scrubber as well as the total energy consumption of the system.

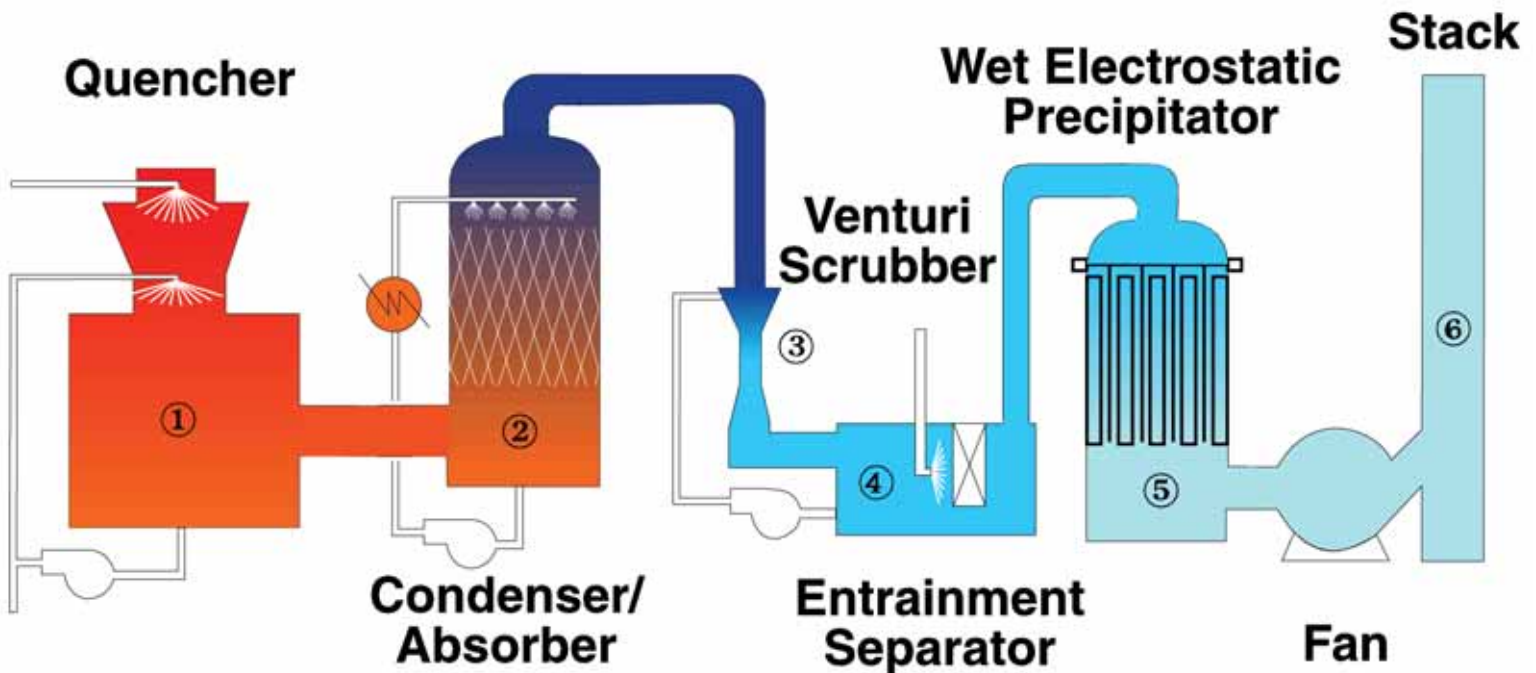
ADVANCED COMBUSTION SYSTEMS

A Division of ACS Inc.

1999 ALPINE WAY, BELLINGHAM WA 98226
PHONE: (360) 676-6005 • FAX: (360) 647-9439
E-mail: info@acs-accs.com



Incinerator Gas Cleaning System



1. Saturator

The saturator is a two-stage design utilizing makeup water followed by a low-pressure-drop Venturi mounted on an integral sump. The Venturi provides turbulence to saturate the gas while collecting large particulate and absorbing acid gases.

2. Condenser/Absorber

The Condenser/Absorber sub-cools and scrubs the acids from the gas. Energy requirements are lowered by reducing the gas volume through condensation of the water vapor. Also, heavy metals such as mercury, lead and cadmium are condensed for collection.

3. Venturi Scrubber

ACS's Venturi Scrubber uses fine drop atomization to create large surface areas for efficient collection of particulate and acid gases. In addition no spray nozzles are used. This allows recirculation of the scrubbing liquid without the usual problem of plugged nozzles or piping.

4. Entrainment Separator

ACS utilizes a special high-efficiency, multi-stage waveform Entrainment Separator which effectively collects the fine droplets, while operating at a low pressure drop. This is extremely important because the presence of entrained liquid affects performance.

5. Wet ESP

The Wet Electrostatic Precipitator (WESP) is designed to eliminate extremely fine particulate and mist as the final "polishing" stage. ACS technology allows the formation of a very stable, intense electrostatic field that is much higher than conventional designs.

6. Plume Suppression

The Condenser/Absorber condenses out more than eighty percent of the flue gas moisture which results in a nearly invisible stack plume under most meteorological conditions. Stack gas reheat may be added to eliminate the white steam plume for all conditions.

ACS, Inc. is your sole source for complete incinerator systems, including scrubbers, emissions monitoring systems and control systems.



ACS INCORPORATED
1999 ALPINE WAY BELLINGHAM, WA 98226
PHONE: 360.676.6005 FAX: 360.647.9439
TOLL FREE: 800.445.0243
WWW.ACS-ACS.COM

