

Ionizing Wet Scrubber (IWS[®]) removes both Acid Gas and Submicron Particulate.

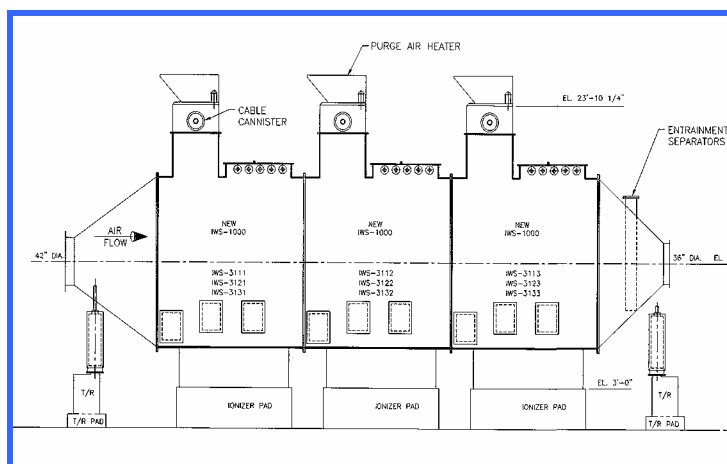
Details	
Market	Chemical Process
Application	Liquid Waste Incineration
Exhaust Volume	64,400 ACFM
Exhaust Temperature	147°F saturated
Contaminants	HCl, Cl ₂ , HBr Submicron Particulate
Removal Efficiency	Acid gases > 99.9% Particulate > 98% (<0.003 gr/DSCF)
Scrubbing Solution	Dilute NaOH solution
Pressure Drop	3.0" W.C. (<1.0 per stage)
Materials of Construction	FRP/Polypropylene

A major company in the chemical process industry recently upgraded their liquid waste incinerator for higher capacity. After reviewing current technologies, they chose Ceilcote's IWS for the pollution abatement system based on their previous successful experience with this product. The same customer has three major incinerators that all use [ionizing wet scrubbers](#) to remove acid gases and fine particulate that can include various heavy metals such as antimony, lead, and zinc. The original system has been in operation for over 20 years and has been [upgraded](#) with an additional IWS stage to meet new regulatory requirements for particulate. IWS systems are capable of achieving outlet [particulate](#) loadings below 0.001 gr/DSCF.

The unique design of the IWS combines the particulate removal capabilities of a WESP with the gas scrubbing capabilities of a packed crossflow scrubber. Each unit is modular and preassembled for ease of installation. Multiple units can be staged in series, parallel or both to achieve very high removal efficiency for the toughest submicron particles such as SiO₂. The IWS has very low pressure drop compared to other traditional wet particulate scrubbers such as [venturis](#) and can be easily retrofitted to existing equipment trains. [Pilot equipment](#) is available for field testing.

Product Literature:

- [IWS Bulletin 12-19](#)
- [IWS Product Sheet](#)



Elevation View of 3-Stage IWS-1000