



Jupiter Scientific

Mercury Dry Scrubber

Jupiter Scientific's Mercury Dry Scrubber is a point-of-use exhaust treatment system with a broad range of process gas scrubbing capability. The Mercury system employs Jupiter Scientific's 500 Liter Europa Scrubbing Cartridges to offer the lowest emissions of any scrubber available today at an extremely affordable price. In all cases where the Mercury is employed it offers guaranteed scrubbing of the target gases to levels below Threshold Limit Values.

The Mercury Dry Scrubbing system employs chemisorption to abate a wide array of industrial emissions. Our chemisorbents ensure that gases have the fastest rate of mass transfer to the adsorbent. The chemisorbents also convert pollutants to stable solids that will not desorb at a later time.

Mercury's Europa 500 liter cartridges are custom blended to each application to ensure maximum abatement of all process gases. This guarantees that customers will achieve compliance for all gases in their process recipe. Custom blending also ensures that adsorbents are not poisoned or fouled since potential poisons and fouling agents are removed before they can harm adsorbents.

In addition, the sophisticated control system of the Jupiter Scientific Mercury maintains a history of all scrubber alerts, temperatures, and exhaust concentration to verify performance and compliance with regulations.

Standard Features of the Mercury Dry Scrubbing System:

- Employs Europa Scrubbing Cartridges for guaranteed sub TLV emissions
- Color Touch Display
- Integrated cabinet and exhaust gas monitoring system to ensure user safety and verify regulatory compliance
- Interlocks to ensure Mercury is operating within specifications
- Real time permanent exhaust concentration data logging
- Ability to extract pressure, temperature and exhaust gas history to USB thumb drive
- Interlock connections to prevent reactor operation when Mercury is offline or in an error state
- Visual and audible alarms
- Integrated flow management
- Integrated temperature monitoring
- Integrated vacuum pump
- Native MODBUS slave (Profibus and Bacnet optional)
- Integrated canister leak check function
- Integrated air oxidation capability
- Ethernet remote access
- Integrated PID pressure control to ensure constant inlet pressure
- Made in the United States of America





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Partial List of Gases Abated By Mercury Dry Scrubbers (abated to less than 1/2 OSHA PEL)

ACID GASES and HALOGENS	HYDRIDES	SEMICONDUCTOR & SOLAR	ORGANICS
Bromine	Ammonia	III-V	Methane
Boron Trichloride	Arsine	II-VI	Alcohols
Boron Trifluoride	Diborane	MOCVD	Propane, Butane, other Alkanes
Chlorine	Germane	PECVD	Acetylene
Fluorine	Phosphine	Tungsten Hexafluoride	Metal Organics
Hydrogen Bromide	Hydrogen Selenide	CIGS	Carbon Monoxide
Hydrogen Chloride	Hydrogen Sulfide	NO, NO ₂	Halogenated Organics
Hydrogen Cyanide	Silane, Disilane	Nitride Deposition	Aromatics (Benzene, Toluene, Xylene, etc)
Hydrogen Fluoride	Stibine	Metal, Dry, and Poly Etch	Carbonyls
Silicon Tetrachloride	Organo-Silanes		
Silicon Tetrafluoride			
Sulfuric Acid			
Many other gases too numerous to list here			