



ALTAIR

The Brightest Solution To Pyrophorics

System Description

The Altair is a passive gas treatment device designed to effectively treat effluent gases from semiconductor process tools. These cost-effective units are employed in a wide variety of applications including, but not limited to, those listed below.



Advantages

- No flammable fuel gases required.
- Small, compact design - 30" long x 23" tall x 14" wide.
- Lowest cost of ownership of any gas treatment device.
- Utilizes existing scrubber or ventilation system by drawing in room air for operation.
- Only 100-220 CFM (1" W.C. static pressure) of scrubber or ventilation air required.
- PMs take only 15-45 minutes to perform.
- Typical PMs are performed on 1-3 month intervals.
- No expensive utilities required for operation.
- Reliable, safe and efficient operation.

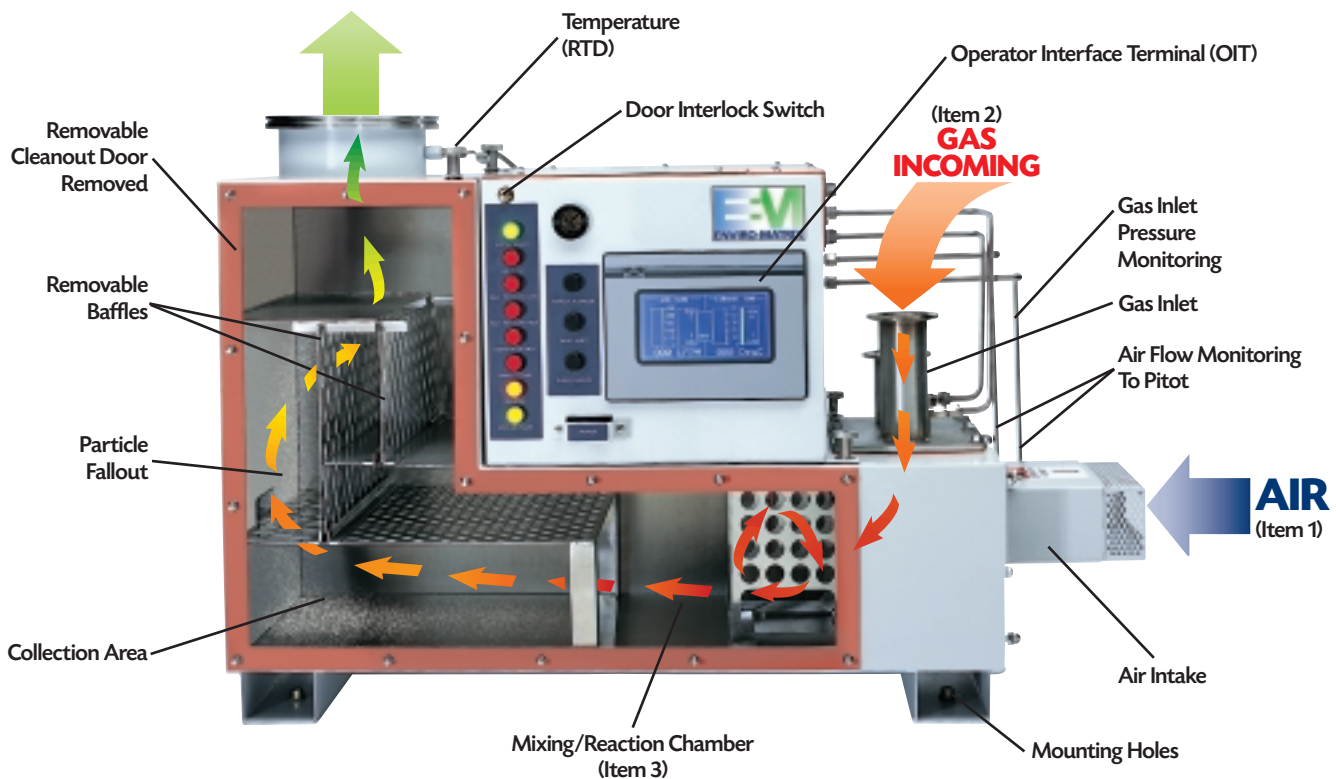
Typical Applications

Processes requiring pyrophoric gases
 Silane Gas Pad
 VMB or Purge Panel vent lines
 Diffusion furnaces - Poly and Nitride
 CVD - Tungsten processes

EPI
 Thin film tools

ENVIRO-MARTIX Altair

EXHAUST TO SCRUB OR VENT



Room air enters the air intake nozzle (Item 1) and mixes inside the reaction chamber (Item 3) with process gases flowing in through the gas inlet nozzle(s) (Item 2). The blending of gases with the air causes the resultant mixture to be either oxidized or diluted to less than 20% of LEL. The exhaust gases may now be safely delivered to a central scrubbing or ventilation system.

Facility Requirements

Gas Inlets	2" KF 50 (1-1/2" KF 40)
Exhaust Outlet	6" ISO 160
Power	100-240 V/1.0 A/50-60 Hz
Exhaust System	250 CFM (1" W.C. static pressure) with a damper

Standard Controls and Monitoring

- Programmable Logic Controller (PLC) and digital display
- Ashcroft® XLDP differential pressure transmitters (airflow and gas nozzle inlet sensing)
- Temperature transmitter (exhaust outlet)
- Clean-out door interlock switch
- Indicating lights, alarm horn, N/C or N/O output terminal for external safety system
- Redundant airflow and temperature safety switches

System Options

- Air inlet valve for special applications
- Heated gas inlet nozzle for special applications (Y-option)
- Coated chambers for corrosive materials (C-option)
- Oversized (XL mode) chamber for more particulate capture and decreased maintenance
- Remote mounting electrical control box (SR model, NEMA 4) for outdoor or special applications
- Mechanical cleaning mechanism (PG model) for the gas inlet nozzles



Optional fail safe air inlet valve with indication



PLC easily accessed for programming