ENVIRO-MATRIX

CYRUS

Dry Solution to Toxic Abatement

System Description

Cyrus is a dry adsorption system that removes various gas phase contaminants from semiconductor effluent gas streams. Primarily used in point-of-use (POU) applications, Cyrus utilizes proprietary, passive, adsorptive materials that remove and concentrate dangerous and highly toxic compounds such as Arsine (AsH_3), Phosphine (PH_3), and Germane (GeH_4). This system can also remove organic compounds and high molecular weight VOC's. Different media mixtures can be provided for adsorbing acid gases and ammonia as well.

Cyrus is available in multiple configurations and sizes. Dual alternating chambers and multistages are available. Sensors monitor pressure drop, temperature, and canister capacity for breakthrough.

Cyrus can be custom-engineered to handle specific processes. In addition, Cyrus can be utilized in conjunction with other Enviro-Matrix systems as a pre- or post-treatment stage.

Advantages

- Abatement to below TLV
- Very high capacities
- Compact and reliable
- Proven performance
- Concentrates toxics
- Small footprint
- Single and dual configurations
- Safe passive design
- Automatic inert purge
- Bed saturation detectors available
- Dual canister designs available

ENVIRO-MATRIX Cyrus Adsorption Abatement Process

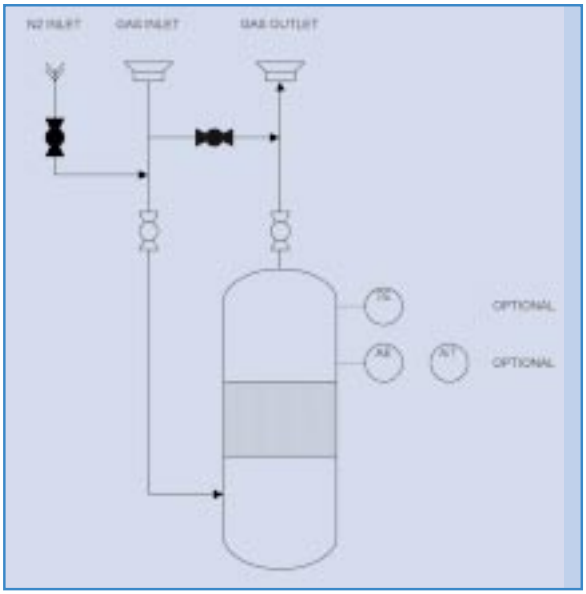
Control of Toxic Gases

Cyrus with Cabinet Door Open

Specifications

Outlet Connection:	1.5” KF 40
Inlet Connection:	1.5” KF 40
Max. Inlet Gas Flow:	up to 300 slm
Typical Gas Flow Rate:	100-150 slm N2
Maximum Contaminant Flow:	4-5% by volume in mixture
Canister Dimensions:	12” O.D. x 70” Tall
Enclosure (Single):	32” L x 32” W x 92” H
Cabinet Exhaust Requirement:	300 cfm

Applications	Gases Treated
Ion Implant	BF_3, ASH_3, PH_3
Metal Etch	BCl_3, Cl_2, HF
MOCVD	ASH_3, PH_3, TMGa



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