

# Chemodyne

## Chemical /Dynamic Oxidation



Chemodyne-14



Chemodyne-18

### **Pyrophoric / toxic gas abatement**

This P.O.U. system is intended to abate pyrophoric gases mixed with toxic gases such as SiH<sub>4</sub> and AsH<sub>3</sub>. Dynamic Oxidation coupled with suitable chemical agents is the safest and most cost effective solution for pyrophoric and toxic gas abatement.

### **Product Features**

- Variety of agents to abate target gases
- Non-combustible particle filter
- Low airflow interlock to shut off hazardous gas
- Cabinet exhaust for secondary containment
- Non-combustible construction
- Gas detection / optional
- UL listed components
- >99% DRE, <TLV can be provided
- E.U. Standards available
- Outdoor option available

### **Benefits**

- Minimal down time
- Low capital & operating costs
- Highest level of safety
- Uses ambient air for oxidation
- Long agent life
- Non-combustible particle filter

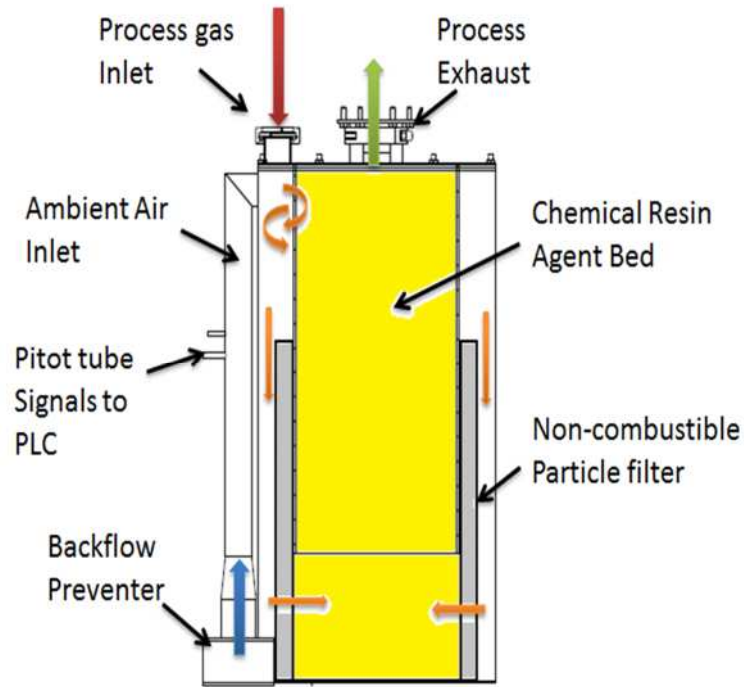
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**Patented Emissions Reduction Equipment**

**www.pureairaz.com**

# Principles of Operation

- The process gases enter the Chemodyne through the process inlets located at the top of the unit.
- The process gas then flows into the reaction chamber where it is mixed with the incoming ambient air (if applicable).
- The process gas is then drawn into the particle filter before entering the system's chemical resin bed.
- The resin mix is prepared by PAS to abate the specific process gases. The selection and mixture of the chemical agents are based on the process definition form provided by the customer. MSDS will be provided upon request.
- Over temperature monitoring is located in the resin bed
- Optional gas detection for exhaust.



# Chemodyne Specifications

| Model                   | Chemodyne-14   | Chemodyne-18    |                                 |
|-------------------------|--|-----------------|---------------------------------|
| Target process gases    | BCl <sub>3</sub> , Cl <sub>2</sub> , HCl, HBr, NH <sub>3</sub> , DCS, B <sub>2</sub> H <sub>6</sub> , PH <sub>3</sub> , SiH <sub>4</sub> , AsH <sub>3</sub> , SiH <sub>2</sub> Cl <sub>2</sub> |                 | Contact factory for other gases |
| Max Toxic Gas Flow      | 100SCCM  | 250SCCM         | Larger systems available        |
| Max Pyrophoric Gas Flow | 1LPM   | 3LPM            | Larger systems available        |
| Total Process Flow      | 50 LPM   | 100 LPM         | Larger systems available        |
| Number of Process Inlet | 2  |                 | KF 25, 1"                       |
| Process Exhaust         | 10-50 CFM  |                 | ISO 80, 3"                      |
| Cabinet Exhaust         | 50 CFM   |                 | KF 50, 2"                       |
| Electrical Requirement  | 120 VAC, 60 Hz, 1 phase, 2 A   |                 | E.U. standards available        |
| Tool Interface          | Interface signals for customer's control/monitoring system   |                 | Relay dry contacts              |
| Dimensions              | 17" x 20" x 52"  | 22" x 22" x 68" | Larger systems available        |
| Shipping Weight         | 190 lbs  | 275 lbs         | Larger systems available        |

*Helping clean the air you breath*