**CRITICAL SYSTEMS’ ZEUS™ HIGH CAPACITY MOCVD ABATEMENT SYSTEM POINT-OF-USE PROCESS EXHAUST SCRUBBER**

**ZEUS Technology:**
Designed for High Flow MOCVD Gas Applications (AsH3 and PH3 to flow rates of 10 slpm) the Critical Systems' ZEUS Dry Scrubber is a highly advanced DryAbatement System that provides Guaranteed scrubbing of the Target Gases to levels well below the (TLV) Threshold Limit Values. With medias that are blended specifically to the gases and flow rates of your unique process applications, the ZEUS utilizes a unique blend of specific Chemisorption medias to assure the maximum abatement of the process gas stream. Custom blending also ensures that adsorbents are not poisoned or fouled since potential poisons and fouling agents are removed before they can harm the media.

The sophisticated ZEUS control system operates the canisters to peak efficiencies to assure the longest life of the canisters at the lowest destruction temperatures, while automated purge cycles insure that the canisters are safe to remove when it comes time for replacement. The ZEUS controller also maintains a history of all scrubber alerts, temperatures and exhaust concentrations to verify performance and compliance with regulations. The ZEUS canisters are UN/DOT stamped for ease of transport to the waste facility of choice.

**Key Features of the ZEUS Point-of-Use Process Exhaust Scrubber:**
- **Guaranteed 99.999% Efficiency** - Monitored at Outlet and Data Logged
- **Integrated Vacuum Pump** - Creates Zero Load on House Exhaust!
- Control Logic Assures that Zero Back Pressure on Process Tool Exhaust
- Integrated Cabinet & Exhaust Monitoring System to Ensure Safety and Compliance
- Ethernet Communications to End User
- Tool Interlock Connections to Prevent Reactor Operation when the ZEUS is Offline
- Integrated Temperature, Pressure & Exhaust Monitoring with Data Logging
- Highest Flow Capacity of any Dry Bed Abatement System for High Flow MOCVD Application

**ZEUS Main Screen**

Since 2000, Critical Systems, Inc. (CSI) has been supporting the breakthrough technologies of our customers with practical, cost effective solutions that “surround the process tool”.

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**ZEUS High Capacity MOCVD Dry Bed Abatement System (cont.)**

**PERFORMANCE:**
- Color Touch Screen Display
- Real Time Flow Schematics
- User Settable Alarm Limits and Functions
- Automated Cycle Purge Routines
- Independent Life Safety Board
- Visual and Audible Fault and Shutdown Alarms
- Digital Inputs for Cabinet Shutdown
- Multiple Password Level Access
- Ethernet and Analog Outputs
- Z-Purge for Class 1 Div 2 Compliance
- Digital Customer I/Os
- Integrated Vacuum Pump

**ALARMS:** *
- Canister Not In Place: Shut Down
- Over Pressure: Shut Down
- Lost Nitrogen: Shut Down
- Toxic Gas In Cabinet: Shut Down
- Toxic Gas at 90%: Notification Alarm
- Toxic Gas at Exhaust: Maintenance Alarm
- Over Temp / Missing TC: Shut & Purge with N2 until Clear
- Warning Temperature: Maintenance Alarm

**FACILITATION INFORMATION:**

**Connections:**
- Process Inlet Connection: NW80 SS / 3” Tube Nominal
- Process Exhaust Connection: KF50 SS / 2” Tube Nominal
- Cabinet Exhaust / Flow: 4” OD x 3” High / 140 CFM @ 1/2” W.C.
- N2 High Purge / Flow: 1/2” SS Swagelok / 10 CFM @ 60-80 psi
- N2 Purge / Flow: 3/8” SS Swagelok / 100 LPM @ 60-80 psi
- N2 Valves / Flow: 1/4” SS Swagelok / 4 CFM @ 60-80 psi
- CDA Air Oxidation: 1/4” SS Swagelok / 25 LPM @ 60-80 psi
- Customer Alarm: 7/8” Through Hole

**Power:**
- 7/8” Through Hole - 110/220 VAC, 5 Amp

**Overall Dimensions:**
- Dual Canister: 76” Tall x 96” Wide x 54” Deep

* With the Dual Canister ZEUS, Shut Down Alarms will activate the second canister while Alarm condition is active.