



**MODEL CD16000 CHEM-DEMIL AIR HANDLING FILTER SYSTEM**  
**SPECIFICATION**

<b>System Air Flow Rate</b>	3200 to 16,000 CFM
<b>System Design Pressure</b>	±24" W.G.
<b>Temperature Range of Air Entering Filter</b>	50°-130°F
<b>Flow Order</b>	Prefilter/HEPA/Charcoal/Charcoal/HEPA/Fan
<b>Prefilter Type</b>	Dry disposal group III-type per ARI Standard 850, Class 1 per UL Standard 900
<b>Prefilter Bank Configuration</b>	1 bank, 4 high × 4 wide
<b>Prefilter Efficiency</b>	80-85% ASHRAE Standard 52-76
<b>HEPA Filter Type</b>	Throw away, extended media, dry-type, bayonet-type per MIL-HDBK-144
<b>HEPA Filter Bank Configuration</b>	2 banks, 4 high × 4 wide
<b>HEPA Filter Efficiency</b>	99.97% on 0.3 micron particles
<b>Charcoal Adsorber Cell Type</b>	Type II per IES Standard CS-8
<b>Charcoal Adsorber Bank</b>	2 banks, 12 cells high × 4 wide
<b>Charcoal Adsorber Bank Air-to-Adsorbent Residence Time</b>	0.25 seconds @ maximum system flow rate
<b>Total System Air-to-Adsorbent Residence Time</b>	0.5 seconds @ maximum system flow rate
<b>Adsorbent Type</b>	8 × 16 mesh activated coconut shell carbon per ANSI N509 (non-impregnated)

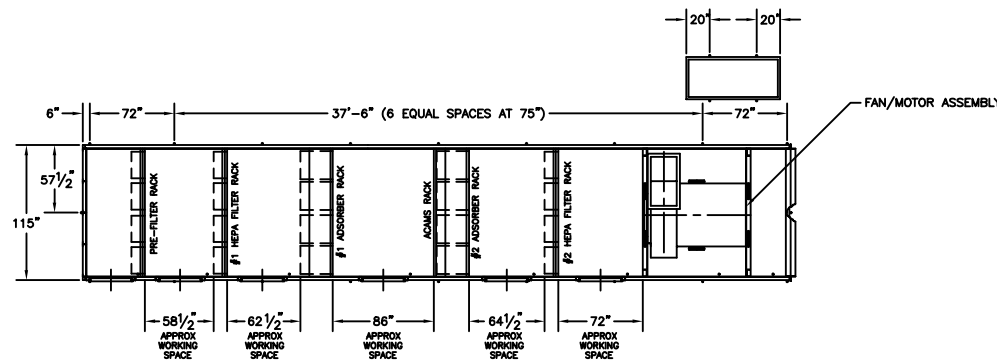
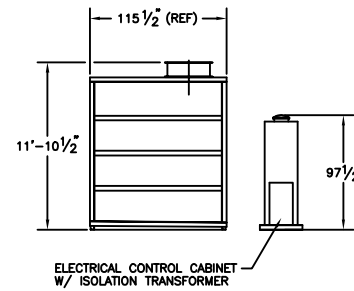
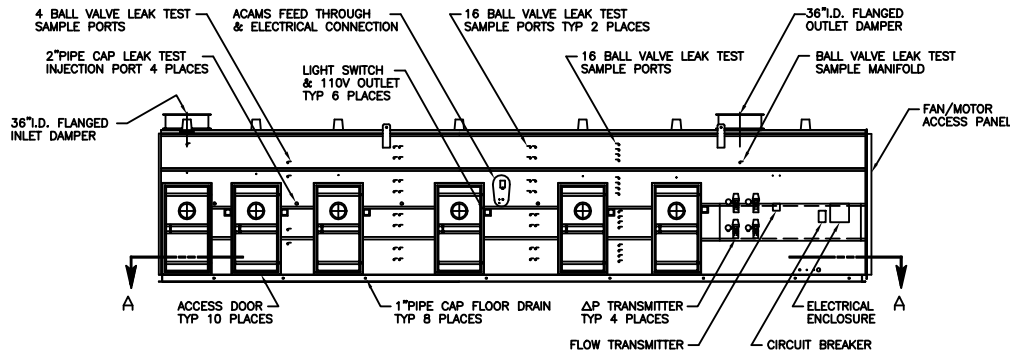
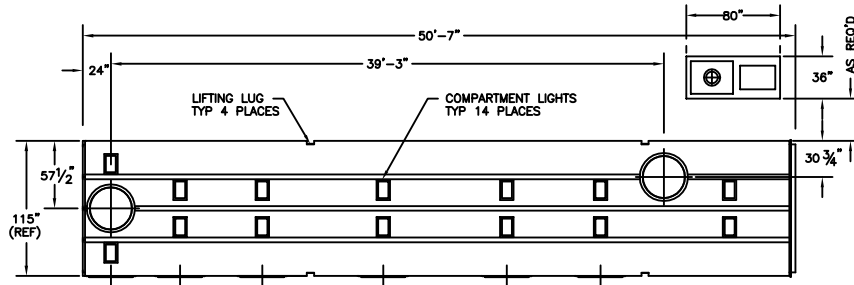
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<b>Inlet / Outlet Dampers</b>	36" diameter butterfly dampers (bubble-tight) with pneumatic actuator
<b>Instrumentation</b>	Differential pressure indicator / transmitters across prefilter and HEPA banks as well as across entire filter system, 4-20 mA  Flow indicator / transmitter, 4-20 mA  Mid-bed agent monitoring array, Teflon, heat-traced
<b>Maximum Housing Leakage Rate</b>	0.1 SCFM/ sq. ft. of housing surface at 10" W.G.
<b>System Design Standard</b>	ANSI N509-1989
<b>Housing Materials of Construction</b>	Stainless Steel, type 304L
<b>Fan Type</b>	Centrifugal single width, single inlet, arrangement 8, air foil wheel
<b>Motor Type</b>	100 Hp, totally enclosed, fan-cooled, 1800 RPM
<b>Motor Speed Control</b>	Variable frequency drive with isolation transformer
<b>Utility Requirements</b>	480 VAC, 3 phase, 60 Hz for lighting, 90 psig plant air for damper actuators and in-place test usage

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



SECTION A-A

PART OR DESCRIPTION NO.		NOMENCLATURE OR DESCRIPTION		UNITIAL SPECIFICATION OR VECTOR	
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS FRACTIONS		CONTRACT NO.		IONEX Research Corporation P.O. Box 602, Brentwood, MD 20686	
±	1/16 ±	±	APPROVALS	DATE	MODEL CD16000 CHEM-DEMIL AHFU
±	1/32 ±	±	DRAWN	2/7/00	
±	1/64 ±	±	CHECKED		
DO NOT SCALE DRAWING		REVISIONS		PRODUCTION ORDER NO.	SIZE D
				SCALE NONE	DRAW. NO. 7032
				SHEET 1 OF 1	