



MODEL CD16000 MDB CHEM-DEMIL AIR HANDLING FILTER SYSTEM
SPECIFICATION

System Air Flow Rate	3200 to 16,000 CFM
System Design Pressure	±24" W.G.
Temperature Range of Air Entering Filter	50°-130°F
Flow Order	Prefilter/HEPA/six charcoal banks in series/HEPA/Fan
Prefilter Type	Dry disposal group III-type per ARI Standard 850, Class 1 per UL Standard 900
Prefilter Bank Configuration	1 bank, 4 high × 4 wide
Prefilter Efficiency	80-85% ASHRAE Standard 52-76
HEPA Filter Type	Throw away, extended media, dry-type, bayonet-type per MIL-HDBK-144
HEPA Filter Bank Configuration	2 banks, 4 high × 4 wide
HEPA Filter Efficiency	99.97% on 0.3 micron particles
Charcoal Adsorber Cell Type	Type II per IES Standard CS-8
Charcoal Adsorber Bank	6 banks, 12 cells high × 4 wide
Charcoal Adsorber Bank Air-to-Adsorbent Residence Time	0.25 seconds @ maximum system flow rate
Total System Air-to-Adsorbent Residence Time	1.5 seconds @ maximum system flow rate
Adsorbent Type	8 × 16 mesh activated coconut shell carbon per ANSI N509 (non-impregnated)

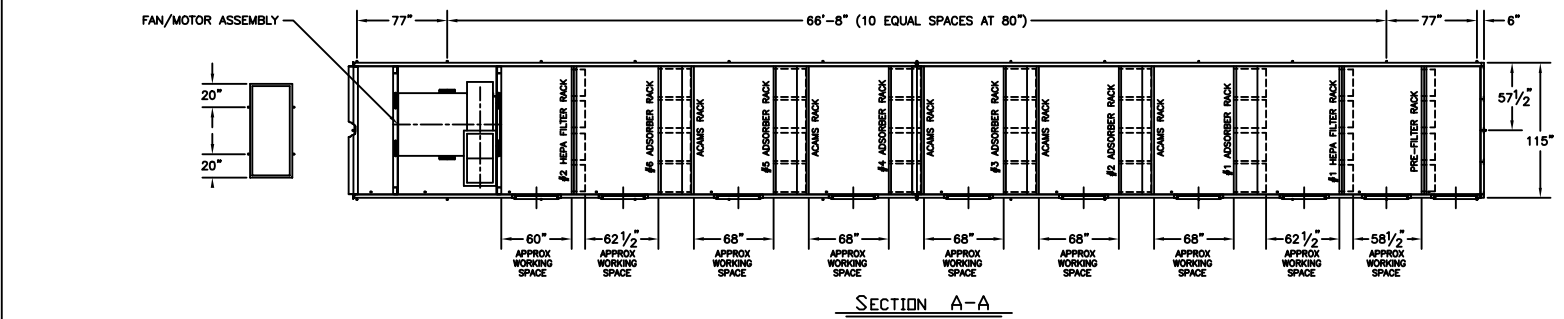
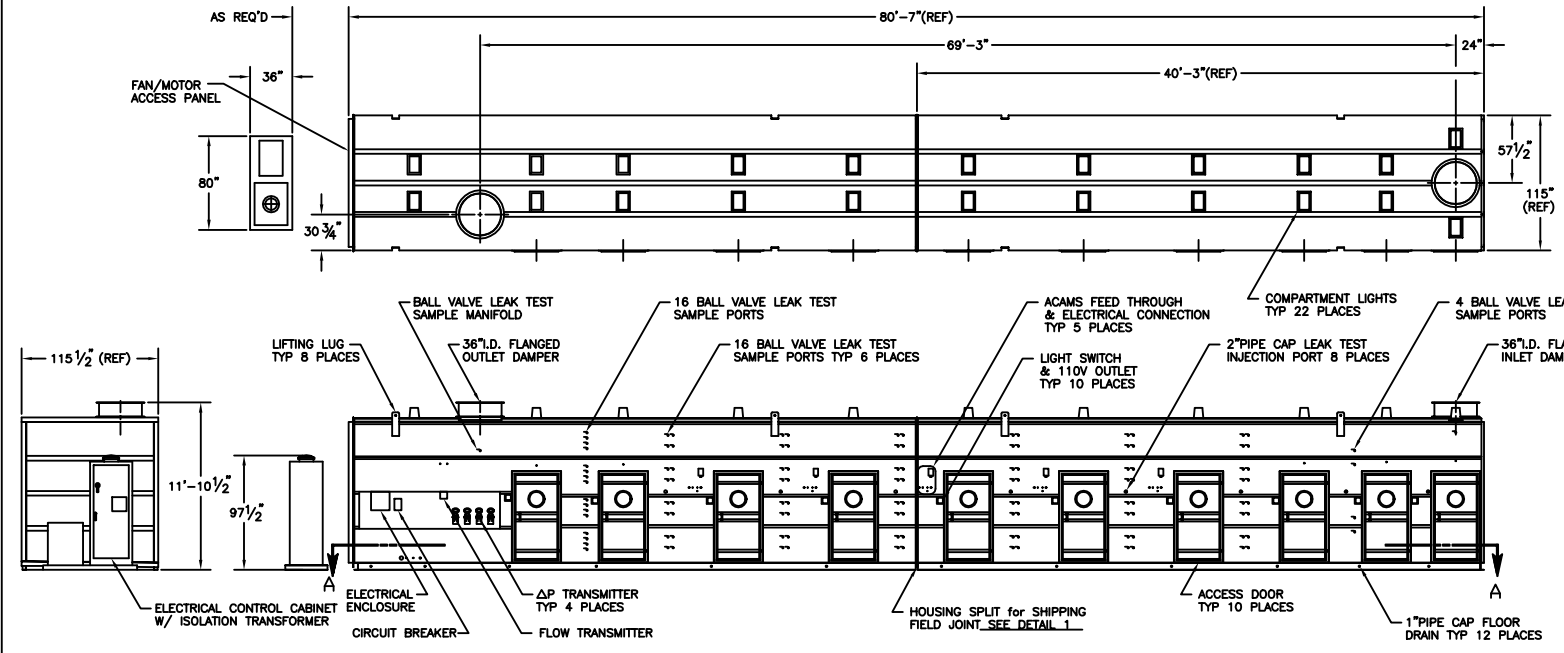
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Inlet / Outlet Dampers	36" diameter butterfly dampers (bubble-tight) with pneumatic actuator
Instrumentation	Differential pressure indicator / transmitters across prefilter and HEPA banks as well as across entire filter system, 4-20 mA Flow indicator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



PART OR DESCRIPTION NO.		HOMOLOGUE OR DESCRIPTION		INTERNAL SPECIFICATION OR VERSION	
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS AND FRACTIONS		CONTRACT NO.		IONEX Research Corporation P.O. Box 602, Broomfield, CO 80002	
±	±	APPROVALS	DATE	MODEL CD16000 MDB CHEM-DEMIL AHFU	
±	±	DRAWN	2/7/00		
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DO NOT SCALE DRAWING		APPROVED		PRODUCTION ORDER NO.	REV. NO. 7031
SCALE NONE		ISSUED		SHEET 1 OF 1	