



**MODEL CD1000 CHEM-DEMIL AIR HANDLING FILTER SYSTEM  
SPECIFICATION**

<b>System Air Flow Rate</b>	Up to 1000 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, 1 high × 1 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, 1 high × 1 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, 3 cells high × 1 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 cocoanut shell carbon per ANSI N509 (non-impregnated)

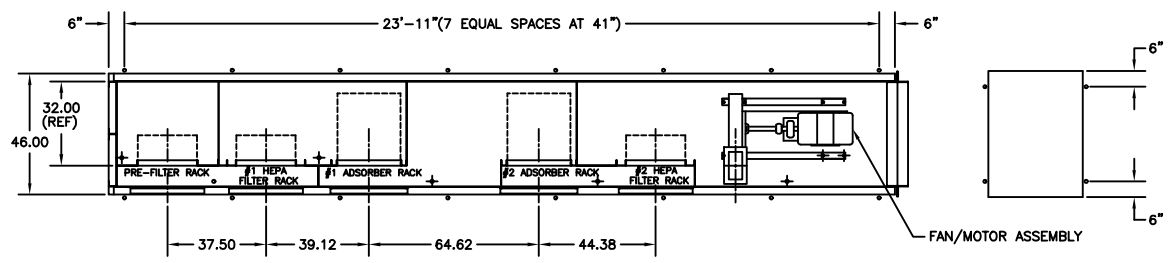
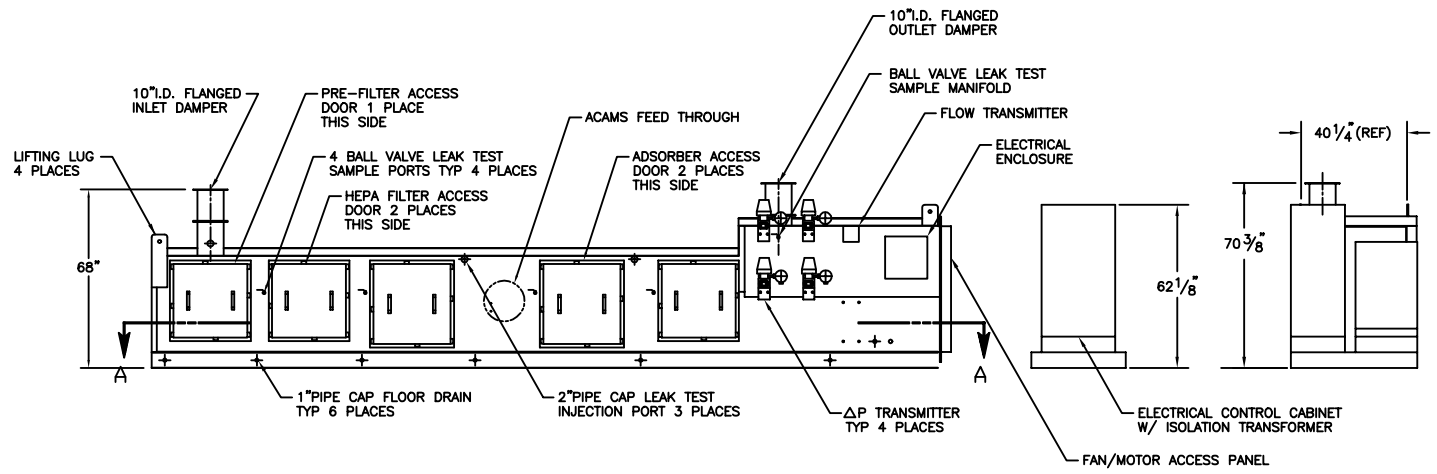
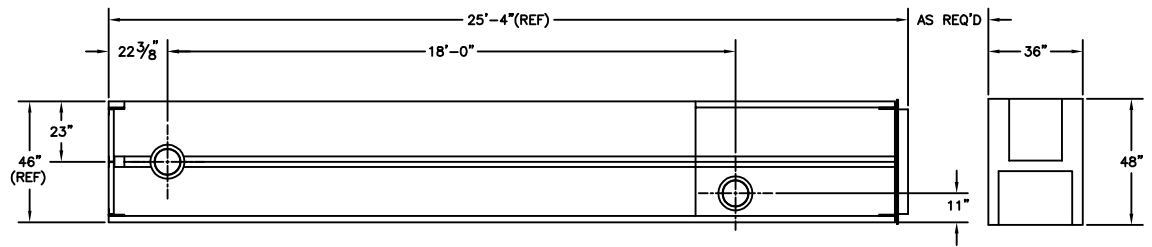
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<b>Inlet / Outlet Dampers</b>	10" diameter butterfly dampers (bubble-tight) with pneumatic actuator
<b>Instrumentation</b>	Differential pressure indicator / transmitters across prefilter and HEPA banks as well as across entire filter system, 4-20 mA  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>	10 Hp, totally enclosed, fan-cooled, 3600 RPM
<b>Motor Speed Control</b>	Variable frequency drive with isolation transformer
<b>Utility Requirements</b>	480 VAC, 3 phase, 60 Hz for system power, 90 psig plant air for damper actuators and in-place test usage

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REVISIONS			
REL.	DESCRIPTION	DATE	APPROVED



SECTION A-A

REV.	PART OR IDENTIFYING NO.	DESCRIPTION OR IDENTIFICATION	QUANTITY	REVISIONS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS $\pm 1/2$ .X ± .2 .XXX ± .12 .XXXX ± .062		CONTRACT NO. APPROVALS DATE 2/7/00	<b>IONEX</b> <small>Research Corporation          P.O. Box 605          Greenwood, CO 80530</small> <b>MODEL CD1000</b> CHEM-DEMIL AHFU
MATERIAL	CHECKED	APPROVED	PRODUCTION ORDER NO. SEC D DRG. NO. <b>7034</b>
DO NOT SCALE DRAWING	REVISED	SCALE NONE	SHEET 1 of 1