Air-X-Changers
Harsco
PO BOX 1804
TULSA, OK 74101-1804
PHONE: 918-619-8000
FAX: 918-384-5202

Job Number	081252
Initial Release Date	12/10/08
Page	1 of 1

1	Purchaser	EXTERRAN		Ultimate User		
2	Inquiry / PO#			Destination		
3	Number of Units	1	Model 108VV	Reference		
4	Assembly	PACKAGED	Draft FORCED	Overall Size(WLH)	~	Est. Weight

PERFORMANCE

5	**Service**	AC				
6	Flow	20MMSCFD + 600BBLS /				
7	Fluid	.65SPGR				
8	Temp. In / Out, f	190.0 / 120				
9	Pressure, psia	915				
10	Pressure Drop, psi	9.3				
11	Heat Load, btu/hr	2,453,017				
12	True LMTD, f	38.0				
13	Overall Rate, U, btu/hr sq ft f	113.4				
14	Fouling Factor, sq ft hr h / btu	0.0020				
15	Surface, Bare / Extended, sq. ft	578 / 9194				
16	**Sections, Number/Connected**	(1) SINGLY				
17	Design Temp (Max / Min), f	350/-20				
18	Design / Test Pressure, psig	1440 / 1872				
19	Pass Arrangement	CROSSFLOW				
20	Number Tube Rows / Tube Passes	3 / 3				
21	Section Weight, lbs					
22	**Tubes, OD x BWG**	5/8X18(.049AVG)				
23	Material	SA249 304				
24	Number per section / Length, ft	257 / 14				
25	Retarders					
26	Accelerators					
27	**Fins, Type**	L-TENSION/WHEEL				
28	Material	ALUMINUM				
29	**Nozzles, Rating / Type**	900 RF				
30	Material / Bore	SA105 / SCH-80				
31	(Number of Inlets) / Size, in	(1) / 6 Inch				
32	(Number of Outlets) / Size, in	(1) / 6 Inch				
33	**Headers, Type**	BOX W/PLUGS				
34	Material	SA516 70				
35	Corrosion Allowance, in	0.0625				
36	Grooved Tubesheet	YES				
37	**Plugs, Type**	SHOULDER				
38	Material	SA105				
39	**Industry Specifications**	AXC-STD				
40	ASME Code Stamp / National Board	YES				
41	Canadian Registration Number					
42	PWHT					
43	NACE					
44	**Inspection / NDT**					

F = 100% R.T. of all header seam & nozzle butt welds plus 100% U.T. of all attachment welds
S = Spot R.T. of one long seam and one end closure, per header
U = 100% U.T. of all header seam, attachment and nozzle butt welds
B = 100% R.T. of all nozzle butt welds
SB = S PLUS B as each are described above
UB = U PLUS B as each are described above

	AIR SIDE PERFORMANCE		FAN DATA		DRIVER DATA		REDUCER DATA
45	Ambient Air Temp., In, f	100	No. Fans / Make	1 / AEROVENT	Type	ENGINE DRIVE	Type REDUCER BY OTHERS
46	Elevation, ft	1000	Blade Material	ALUMINUM			
47	Air Flow, SCFM	131849	HP@RPM	31.8 @ 495			
48	Air Temp., Out, f	114	Dia., in / No. Blades	108 / 6			
49	Min. Ambient, f	100	Blade Angle, Deg	22 @ 5/6 RADIUS			
50			Series/Blade Adj.	MANUAL			
51			Fan Hub Bushing				

REV	DATE	BY	DESCRIPTION
1	12/07/09	SF	Rev'd customer name

Additional Drawing No.

Header Volume (cu.ft.)

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Air-X-Changers, A Harsco Company, 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA
(Name and address of manufacturer)

2. Manufactured for EXTERRAN, PO BOX 690349, HOUSTON, TX, 77269, USA
(Name and address of purchaser)

3. Location of Installation UNKNOWN
(Name and address)

4. Type Heat Exchanger (Horizontal or vertical, tank) | 081252.1 (Manufacturer's serial number) | N/A (CRN) | HDR-1, REV0 (Drawing No.) | 65554 (National Board number) | 2009 (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 2007 (year) to N/A [Addenda (Date)]

N/A (Code Case numbers) | N/A (Special Service per UG-120(d))

6. Shell: SA516 70 (Material spec. number, grade) | 1.125 in (Nominal thickness) | 0.0625 in (Corr. allow.) | N/A (Inner diameter) | N/A [Length (overall)]

7. Seams: Corner Joint [Long. (welded, dbl., sngl., lap, butt)] | N/A R.T.(Spot or Full) | C=.20 Eff.(%) | N/A (H.T. temp) | N/A Time (hr) | N/A [Girth. (welded, dbl., sngl., lap, butt)] | N/A [R.T. (spot or full)] | N/A Eff(%) | N/A No. of Courses

8. Heads: (a) Material SA516 70 (Spec. no., grade) (b) Material SA516 70 (Spec. no., grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	TOP, BTM	1.0"	0.0625	N/A	N/A	N/A	N/A	N/A	6.1875" x 130.375"	N/A
(b)	ENDS	.75"	0.0625	N/A	N/A	N/A	N/A	N/A	6.1875" x 3.75"	N/A

If removable, bolts used (describe other fastenings) N/A
(Material, spec. number, grade, size, number)

9. MAWP 1440 psi (Internal) | N/A (External) at max. temp. 350 °F (Internal) | N/A (External)

Min. design metal temp. -20 °F at 1440 psi . Hydro, pneu., or comb. test pressure HYDRO. at 1872 psi

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	Number	Diameter or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
IN/OUT	2	6"	900# RFWN	SA105/SA106 GR.B	SCH-80	Weld	Welded	Header
DRAIN	2	1"	CPLG	SA105	6000#	Weld	Welded	Header
DRAIN	1	1"	CPLG	SA105	6000#	Weld	Welded	Nozzle

11. Supports: Skirt NO (Yes or no) Lugs N/A (Number) Legs N/A (Number) Other Structure (Describe) Attached Bolted (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report:

N/A
(Name of part, item number, Manufacturer's name and identifying stamp)

Line 6 - -Tube and Plug Dimensions OR Header Dimensions: 5.7500" X 1.1250" X 10' 10.3750"
Straight length of tubes, OR, Distance between the headers: 14' 0.0"
(A)TUBES: 257 x .625" OD, Gauge: 18BWG, Material: SA249 304 Rolled Tube Sheet
(B)INSP.OPENINGS: 514, Type: 3/4X16UNF-Threaded, Material: SA105 (C)IMPACT REQUIREMENTS: IMPACT

Additional Remarks - See Attached U-4...

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires 12/31/2011

Date 04/29/2009 Co. name Air-X-Changers, A Harsco Company (Manufacturer) Signed Janine K. Tremel (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co. of Lynn, MA have inspected the component described in this Manufacturer's Data Report on April 30, 2009 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 04/30/2009 Signed William B Bowman (Authorized Inspector) Commissions 12752A, OK951 (National Board (incl. endorsements), State, Province and number)