

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: AXH air-coolers, LLC - 401 EAST LOWRY ROAD - CLAREMORE, OKLAHOMA 74017
(Name and address of manufacturer)

2. Manufactured for: AG EQUIPMENT COMPANY, 3401 WEST ALBANY, BROKEN ARROW, OK 74012

3. Location of installation: UNKNOWN
(Name and address)

4. Type HORZ. H. EXCHANGER 130724P.3 NONE 130724-HDR-IC R0 31332 2014
(Horizontal, or vertical, tank) (Manufacturer's serial no.) (CRN) (Drawing number) (National Board number) (Year built)

5. ASME CODE, SECTION VIII, DIVISION 1 2013 EDITION / NONE
[Edition and Addenda, if applicable (date)] (Code Case numbers) [Special service per UG-120(D)]

6. Shell TUBE/PLUG: SA-516-70 FR & BK 1 1/8" .0625" FR & BK 0' 8 13/16" 4' 2 3/8"
(Material spec. number, grade) (Nominal thickness) (Corr. Allow.) (Inner diameter) (Length (overall))

Body Flanges on Shells									Bolting			
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

7. Seams CORNER JOINT NONE 1.0 NONE NONE - - - *2
[Long. (welded, dbl., singl., lap, butt)] [R.T. (spot or Full)] (Eff., %) (H.T. temp. °F) (Time, hr) [Girth (welded, dbl., singl., lap, butt)] [R.T. (spot or full)] (Eff., %) (No. of courses)

8. Heads (a) Material WRAPPERS: SA-516-70 (b) Material ENDS: SA-516-70
(Spec. no., grade) (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)	WRAPPERS	1"	.0625"	-	-	-	-	-	**	FLAT
(b)	ENDS	7/8"	.0625"	-	-	-	-	-	***	FLAT

Body Flanges on Heads									Bolting			
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-

9. MAWP 845 psi. N/A at max. temp. 350 °F N/A
(Internal) (External) (Internal) (External)

Min. design metal temp. -20 °F at 845 psi. Hydro., pneu.-or-comb. test pressure 1268 psi.

Proof test NONE

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diameter or size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
INLET/OUTLET	2	8"-600#	PIPE/RFWN	SA106-B	SA-105	S/80	.0625"	NONE	UW-16(a)	UW-12(1)	HEADER
INSTRUMENT	1	1"	CPLG	SA-105	-	6000#	.0625"	NONE	UW-16(a)	-	HEADER
PLUGS	106	1 5/8"-12	UNF	SA-105	-	-	-	-	-	-	HEADER

11. Supports: Skirt NO Lugs N/A Legs N/A Other STRUCTURE Attached BOLTED
(Yes or no) (Number) (Number) (Describe) (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: (Name of part, item number, Manufacturer's name and identifying stamp)

*2 HEADERS, ONE AT EACH END. **WRAPPERS FLAT DIA. 7 3/8" X 4' 2 3/8". ***ENDS FLAT DIA. 7 3/8" X 6 13/16".

53 TUBES SA-214 1 1/2" O.D. X .060 MW 52' 0" LG.

IMPACTS EXEMPT PER UG-20(f). PRESSURE RELIEF DEVICE BY OTHERS. CONSTRUCTED IN ACCORDANCE WITH APPENDIX 28.

FORM U-1A (Back)

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 Number 34,950 expires 02/07/2017

Date 11.3.2014 Co. name AXH air-coolers, LLC. Signed Renee Weeks
(Manufacturer) (Representative)

CERTIFICATE OF SHOP / FIELD INSPECTION

Vessel constructed by AXH air-coolers, LLC. at 401 E. LOWRY ROAD - CLAREMORE, OKLAHOMA 74017

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ONECIS INSURANCE COMPANY OF LYNN, MA

have inspected the component described in this Manufacturer's Data Report on 10-30-14, 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 11-4-14 Signed [Signature] Commissions NB12461A OK883
(Authorized Inspector) [National Board (incl. endorsements)]