

**FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
**As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1**

**66356155**

1. Manufactured and certified by RICSA INDUSTRIAL S.A. DE C.V. KILOMETRO 8 CARRETERA LIBRE QUERETARO-CELAYA FRACCIONAMIENTO INDUSTRIAL  
BALVANERA CORREGIDORA, QUERETARO, CP 76920 MEXICO  
 (Name and address of Manufacturer)

2. Manufactured for INVISTA S.A. S.R. 12455 STRANG ROAD, LA PORTE TX 77571 EE.UU  
 (Name and address of Purchaser)

3. Location of installation UNKNOWN  
 (Name and address)

4. Type: VERTICAL CONTACT CONDENSER 08-4983-1  
 (Horiz., vert., or sphere) (Tank, separator, heat exh., etc.) (Mfg's. serial No.)

08-4983-D-01 REV.6 469 2008  
 (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)

5. ASME Code, Section VIII, Div. 1 EDITION 2007  
 [Edition and Addenda (date)] (Code Case No.) [Special Service per UG-120(d)]

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.

6. Shell (a) No. of course(s): 5 (b) Overall length (ft & in.): 19' - 6.0"

No.	Course(s)		Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
	Diameter, in.	Length (ft & in.)		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	60" O.D	4'-11.5625"	SA-240-T304	0.250"	0	1	SPOT	85%	1	SPOT	85%		
2	60" O.D	4'-11.0625"	SA-240-T304	0.250"	0	1	SPOT	85%	1	SPOT	85%		
1	60" O.D	3' - 3.375"	SA-240-T304	0.250"	0	1	SPOT	85%	1	SPOT	85%		
1	60" O.D	1' - 5.0"	SA-240-T304	0.250"	0	1	SPOT	85%	1	SPOT	85%		

7. Heads: (a) SA-240-T304/304L (b) SA-240-T304/304L  
 (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.) (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
1 BOTTOM	0.312"	0			2:1					YES	1	FULL	100%
2 TOP	0.312"	0			2:1					YES	1	FULL	100%

If removable, bolts used (describe other fastening) MANHOLE BOLTS SA-193-B7/SA-194-2H 1 -1/8" Ø 20/40  
 (Mat'l Spec. No., Grade, size, No.)

8. Type of jacket \_\_\_\_\_ Jacket closure \_\_\_\_\_  
 (Describe as ogge & weld, bar, etc.)

If bar, give dimensions \_\_\_\_\_ If bolted, describe or sketch.

9. MAWP 125 \_\_\_\_\_ psi at max. temp. 300 \_\_\_\_\_ °F. Min. design metal temp. -20 °F at 125 psi.  
 (internal) (external) (internal) (external)

10. Impact test NO, EXEMPT PER UHA-51 (d) & UC-S66 (c) at test temperature of \_\_\_\_\_ °F.  
 [Indicate yes or no and the component(s) impact tested]

11. Hydro., pneu., or comb. test press. Hydro at 175 PSI

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: \_\_\_\_\_  
 [Stationary (Mat'l Spec. No.)] [Dia., in. (subject to press.)] (Nom. thk., in.) (Corr. Allow., in.) [Attachment (welded or bolted)]

\_\_\_\_\_ [Floating (Mat'l Spec. No.)] (Dia., in.) (Nom. thk., in.) (Corr. Allow., in.) (Attachment)

13. Tubes: \_\_\_\_\_  
 (Mat'l Spec. No., Grade or Type) (O.D., in.) (Nom. thk., in. or gauge) (Number) [Type (Straight or U)]

Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s) \_\_\_\_\_ (b) Overall length (ft & in.): \_\_\_\_\_

No.	Course(s)		Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
	Diameter, in.	Length (ft & in.)		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time

15. Heads: (a) \_\_\_\_\_ (b) \_\_\_\_\_  
 (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.) (Mat'l Spec. No., Grade or Type) (H.T. - Time & Temp.)

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.

If removable, bolts used (describe other fastening) \_\_\_\_\_  
 (Mat'l Spec. No., Grade, size, No.)

**FORM U-1 (Back)**

16. MAWP \_\_\_\_\_ psi at max. temp. \_\_\_\_\_ °F. Min. design metal temp. \_\_\_\_\_ °F at \_\_\_\_\_ psi.  
 (internal) (external) (internal) (external)

17. Impact test \_\_\_\_\_ at test temperature of \_\_\_\_\_ °F.  
 [Indicate yes or no and the component(s) impact tested]

18. Hydro., pneu., or comb. test press. \_\_\_\_\_ Proof test \_\_\_\_\_

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	Flow Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
OUTLET	3	NPS 2	WNCL-150	SA-312T304	SA-182F304	SCH.80s	0		UW 16.1 (c)	FIG. 2-4 (6)	
OUTLET	1	NPS 2	WNCL-150	SA-312T304	SA-182F304	SCH.80s	0		UW 16.1 (a)	FIG. 2-4 (6)	
INLET	1	NPS 24	LJ CL-150	SA-240T304	SA-105	0.375"	0	SA-240T304	UW 16.1 (d)		TOP HEAD
INLET	1	NPS 3/4	LWN CL-150	SA-312T304	SA-182F304		0		UW 16.1 (c)		
INLET	1	NPS 1-1/2	WNCL-150	SA-312T304	SA-182F304	SCH.80s	0		UW 16.1 (c)	FIG. 2-4 (6)	
OUTLET	1	NPS 16	LJ CL-150	SA-240T304	SA-105	0.375"	0	SA-240T304	UW 16.1 (d)		
INLET	1	NPS 20	LJ CL-150	SA-240T304	SA-105	0.250"	0	SA-240T304	UW 16.1 (d)		
INLET	1	NPS 14	LJ CL-150	SA-240T304	SA-105	0.250"	0	SA-240T304	UW 16.1 (d)		

20. Supports: Skirt NO Lugs ---- Legs ----- Others SADDLES & PADS FOR TRUNIONS OF LIFTING LUGS Attached ----- SHELL / WELDED  
 (Yes or no) (No.) (No.) (Describe) (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: (List the name of part, item number, mfg's. name and identifying number)

22. Remarks: \_\_\_\_\_

**HYDROSTATIC TEST IN VERTICAL POSITION FOR NON LETHAL SERVICE**  
**PRESSURE RELIEF DEVICE PER UG-125 BY USER, Mfr. Serial Die Marked on shell 08-4983-1**

**CERTIFICATE OF SHOP COMPLIANCE**

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No. 28.988 Expires JUNE 18, 2011

Date 7/08/08 Name RICSA INDUSTRIAL S.A. DE C.V. Signed Leticia Olvera M.  
 (Manufacturer) (Representative)

**CERTIFICATE OF SHOP INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of GEORGIA and employed by HSB CT of HARTFORD, CT have inspected the pressure vessel described in this Manufacturer's Data Report on 7/08/08 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his 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 7/08/08 Signed Arturo Llanos Commissions 12568 "A", GA-673  
 (Authorized Inspector) (Nat'l Board incl. endorsements, State, Province, and No.)

**CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE**

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1. U Certificate of Authorization No. \_\_\_\_\_ Expires \_\_\_\_\_

Date \_\_\_\_\_ Name \_\_\_\_\_ Signed \_\_\_\_\_  
 (Assembler) (Representative)

**CERTIFICATE OF FIELD ASSEMBLY INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of \_\_\_\_\_ and employed by \_\_\_\_\_ of \_\_\_\_\_, have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that part referred to as data items \_\_\_\_\_, not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ psi. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his 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 \_\_\_\_\_ Signed \_\_\_\_\_ Commissions \_\_\_\_\_  
 (Authorized Inspector) (Nat'l Board incl. endorsements, State, Province, and No.)