

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

1. Manufactured and certified by CASALB INDUSTRIES, INC. 410 SOUTH AVE., GARWOOD, N.J. 07027
(Name and address of Manufacturer)

2. Manufactured for ROHM & HAAS CO., BRISTOL, PA. 19007
(Name and address of Purchaser)

3. Location of installation ROHM & HAAS CO., BAYPORT, TEXAS 77571
(Name and address)

4. Type: VERT. PRESSURE VESSEL 8142-A
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Mfg's serial No.)

NA 8145-10 547 1995
(ICRM) (Drawing No.) (Nat'l. Bd. No.) (Year built)

5. ASME Code, Section VIII, Div. 1 1992 ADDITION, A-93 ADDENDA NA NA
(Mat'l Spec. No., Grade or Type) H.T. -- Time & Temp. 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 multi-chamber vessels.

6. Shell (a) No. of course(s): (2) (b) Overall length (ft & in.): 9'-8"

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length (ft & in.)	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	4'-6"	8'-0"	SA516-70		.375"	.125"	1	SPOT	.85%	1	SPOT	.85%	NA	NA
2	4'-6"	1'-8"	SA516-70		.375"	.125"	1	SPOT	.85%	1	SPOT	.85%	NA	NA

7. Heads: (a) SA516, GR-70 (NO HEAT TREAT) (b) SA516, GR-70 (NO HEAT TREAT)
(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.
(a)	TOP	.375"	.125"	NA	NA	2:1	NA	NA	NA	YES	YES	NA	NA	NA
(b)	BOTTOM	.375"	.125"	NA	NA	2:1	NA	NA	NA	YES	YES	NA	NA	NA

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

8. Type of jacket NA Jacket closure NA
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions NA If bolted, describe or sketch.

9. MAWP 138 P/V psi at max. temp. 450 450 °F Min. design metal temp. -15 °F at RV/138 psi.
(internal) (external) (internal) (external)

10. Impact test NO
(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. 207 PSIG Proof test NA

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: NA NA NA NA
Stationary (Mat'l Spec. No.) Dis., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)

NA NA NA NA
Floating (Mat'l Spec. No.) Dis., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: NA NA NA NA
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) NA (b) Overall length (ft & in.): NA

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

15. Heads: (a) NA (b) NA
(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.
(a)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
(b)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

17. Impact test NO
(Indicate yes or no and the complementary impact tested)

18. Hydro., pneu., or comb. test press. NA Proof test NA

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
HANWAY	(1)	22"	150# SO	SA516-70	SA516-70	.375	125	SA516-70	UN16.1a	UN16.1b	TOP HEAD
LEVEL	(1)	3"	300# PAD	SA105	--	2.00	125	NA	UN16.1d	NA	
SPARE	(1)	1"	300# PAD	SA105	--	1.75	125	NA	UN16.1d	NA	
OUTLET/SPARE	(4)	3"	300# LJ	SA105	--	.438	125	NA	UN16.1d	NA	
OUTLET	(2)	2"	300# LJ	SA105	--	.344	125	NA	UN16.1d	NA	
VENT CONN	(1)	1-1/2"	300# LJ	SA105	--	.281	125	NA	UN16.1d	NA	
INST. CONN	(1)	1"	300# LJ	SA125	--	.250	125	NA	UN16.1d	NA	

20. Supports: Skirt NO Lugs (4) Legs NA Others NA Attached WELDED TO SHULL
(Yes or no) (No.) (No.) (Describe) (Where and how)

(List the name of part, item number, mfg's. name and identifying number)

~~NO PARTIAL DATA REP.~~

22. Remarks: NA

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 Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No. 16980 Expires SEPT 28, 19 96

Date 4/3/95 Name CASALE INDUSTRIES, INC. Signed [Signature]
(Manufacturer) (Representative)

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 N.J. and employed by KEMPER NATIONAL INS. COS. of LONG GROVE, ILL. have inspected the pressure vessel described in this Manufacturer's Data Report on 4/3, 19 95, 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 4/3/85 Signed William L. Gigg Commissions NB11315 A NJ1072
(Authorised Inspector) (Not to be used incl. endorsement, State, Province and No.)

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 _____, 19 _____

Date _____ Name _____ (Assembly) _____ Signed _____ (Representative) _____

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 parts 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 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 _____ (Authorized Inspector) _____ Commissions _____ (Nat'l Board Incl. endorsement, State, Province and No.) _____