

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

1. Manufactured by Atlas Industrial Manufacturing Co., 51 Somerset Place, Clifton, N. J.
(Name and address of manufacturer)
2. Manufactured for Hoffmann-La Roche, Nutley, N. J.
(Name and address of purchaser)
3. Location of installation Hoffmann-La Roche, Holmdel, N. J.
(Name and address)
4. Type Hor. Ht. Exch. Vessel No. 5005 C-7974-1 4186 Year Built 1982
(Horiz. or vert. tank) (Mfr's Serial No.) (CRN) (Drawing) (Nav. Ord No.)
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 1980 and Addenda to (Year)
Sum. B1 and Code Case no. _____ Special service per UG-120(d) _____
(Date)

Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: Exp. Jt. Item 18 Zallen Bros. Inc. S/N 43389-3
(Name of part, item number, mfr's name and identifying stamp)

Items 6-11 Incl. to be completed for single welded vessels, jackets of jacketed vessels, or shells of heat exchangers

6. Shell: Material 316L SA-240 Nominal Thickness 1/4 in. Corrosion Allowance 0 in. Diam. 3 ft 4 in. Length 15 ft 7/8 in.
(Spec. No., Grade)

7. Seams: Longitudinal Welded Dbl. Butt R.T. None Efficiency 70 % H.T. Temp _____ F
(Welded, Dbl., Sngl., Lap, Butt) (Spot or Full)
Time _____ Girth Welded, Dbl. Butt, Dbl. Fillet, Sngl. R.T. None No. of Courses 3
(Welded Dbl., Sngl., Lap, Butt) (Spot, Partial or Full)

8. Heads: (a) Material SS-316L SA-240 (b) Material _____
(Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)					
(b)					
Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)		
(a)					
(b)					

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

9. Type of Jacket _____ Proof Test _____
10. Jacket Closure _____ If bar, give dimensions _____ If bolted, describe or sketch.
(Describe as ogee & weld, bar, etc.)

11. Constructed for max. allowable working pressure 75 psi at max. temp. 300 F Min. temp. (when less than -20 F) _____ F.
Hydrostatic, pneumatic, or combination test pressure 113 psi

Items 12 and 13 to be completed for tube sections.

12. Tubesheets: Stationary—Material SS-316L SA-240 Diam. 44 in. Nominal Thickness 1 5/8 in. Corrosion Allowance 0 in. Attachment Welded Floating—Material _____ Diam. _____ in.
(Spec. No., Gr.) (Subject to pressure) (Welded, Bolted) (Spec. No., Grade)

13. Tubes: Material SS-316L SA-240 O.D. 3/4 in. Nominal Thickness .065 in. or gauge Number 16 Type Straight
(Spec. No., Gr.) (Straight or "U")

Items 14-17 Incl. to be completed for longer chambers of jacketed vessels or channels of heat exchangers.

14. Shell: Material 316L SA-240 Nominal Thickness 1/4 in. Corrosion Allowance 0 in. Diam. 3 ft 4 in. Length 2 ft 8 in.
(Spec. No., Gr.)

15. Seams: Longitudinal Welded, Dbl. Butt R.T. None Efficiency 70 % H.T. Temp _____ F Time _____
(Welded, Dbl., Sngl., Lap, Butt) (Spot or Full)
Girth Dbl. Fillet, Sngl. R.T. None No. of courses 1
(Welded, Dbl., Sngl., Lap, Butt) (Spot, Partial, or Full)

16. Heads: (a) Material SA-515-70 (b) Material _____
(Spec. No., Grade) (Spec. No., Gr.)

Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)					
(b)					
Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)		
(a)					
(b)					

If removable, bolts used (describe other fastenings) A.S. SA-193-B7 3/4" 160
(Material, Spec. No., Gr., Size, No.)

(12/31/77)

This form (E00108) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM U-1 (BACK)

17. Constructed for max. allowable working pressure 75 psi at max temp. 300 F. Min. temp. (when less than -20 F) _____ F.
Hydrostatic, pneumatic, or other test pressure _____ psi.

Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number _____ Size _____ Location _____

19. Nozzles: *

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
Outlet	1	18"	L.J.	SS316L, SA-240	3/16"		Welded
Inlet	1	10"	L.J.	SS316L, SA-240	3/16"		Welded
Inlet	1	6"	L.J.	SS316L, SA-312W	.280"		Welded
Drain	1	4"	L.J.	SS316L, SA-312W	.237"		Welded
Instr	2	3"	L.J.	SS316L, SA-312W	.216"		Welded

20. Inspection Openings: _____
Manholes No. _____ Size _____ Location _____
Handholes No. _____ Size _____ Location _____
Threaded No. _____ Size _____ Location _____

21. Supports: Skirt No Lugs No Legs 2 Other _____ Attached Shell-Welded
(Yes or no) (No.) (No.) (Describe) (Where and how)

22. Remarks: Column #12 Reboiler Tema Type "AEL"
Hoffmann-La Roche P.O. No. E-741255-n Equip. Code #CSE-23002
Atlas Job No. 4646 *Sec U-4 attached

CERTIFICATE OF 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 Code for Pressure Vessels, Section VIII, Division 1.
Date 7-15-82 Signed Atlas Industrial Mfg. Co. by James H. Hallam
(Manufacturer) (Representative)

"U" Certificate of Authorization No. 5027 expires April 30, 1985

CERTIFICATE OF SHOP INSPECTION

Vessel made by Atlas Industrial Mfg. Co. at 81 Somerset Place, Clifton, N. J.
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 Lumbermens Mutual Casualty
of Long Grove, Ill. have inspected the pressure vessel described in this Manufacturers' Data Report on JUL 19 1982 19 _____
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 the Manufacturers' 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 JUL 21 1982
Signed [Signature] Commissions _____ (Nat'l Board, State, Province and No.)

CERTIFICATE OF COMPLIANCE FOR FIELD WORK

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.
Date _____ Signed _____ by _____
(Manufacturer) (Representative)

"U" Certificate of Authorization No. _____ expires _____, 19 _____

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 Manufacturers' 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 that, 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 Manufacturers' 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 _____ (Nat'l Board, State, Province and No.)

EQUIP. CODE NO. C.SF- 230002

4646

NATIONAL BOARD NO. 1411867	
ATLAS INDUSTRIAL MFG. CO. CLIFTON, N.J.	
SHELL	17/16" P.S.I. AT 13000
TUBES	17/16" P.S.I. AT 13000
SERIAL	15000500
YEAR	1937
PORT NO. 17/16" 2500 PSI 10000	
EQUIP. NO. 17/16" 2500 PSI 10000	
EQUIP. PRESS. 17/16" 2500 PSI 10000	
EQUIP. NO. 17/16" 2500 PSI 10000	