

CSF00001

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As required by the Provisions of the ASME Code Rules, Section VIII, Division 1

- Manufactured and certified by DOYLE & ROTH MFG. CO., INC. ONE HAZEL AVENUE SIMPSON, PA 16407
- Manufactured for HOFFMAN LA ROCHE
(Name and address of purchaser)
- Location of Installation ELVEDERE, NJ 07823
- Type HORIZONTAL J-7014 - A-468P-1 - 1992
(Horiz. or Vert. tank) Mfr. Serial No. CRN Drawing Matl. Bd. # Yr. Built
- 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 1 9
A-90 Addenda (date) Code Case No. Special service per UG-120(d) Year
- (a) Drawing prepared by DOYLE & ROTH MFG. CO., INC. (b) Description of part inspected REPLACEMENT BONNETS GR.

7. Postweld heat treatment: TEMP - Deg. F TIME -

Items 8-13 incl. to be completed for single wall vessels, jackets of jacketed vessels or shells of heat exchangers.

- Shell: - - - - -
Matl. Spec. No. Grade Nom. Thk. (in.) Corr. Allow. (in.) Diam. O.D. (ft. & in.) Length (Overall) (ft. & in.)
- Seams Long (Dbl., Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (Deg. F)
Time Girth (Dbl., Sngl.) R.T. (Spot, Partial or Full) No. of Courses

- Heads: (a) Matl. - (b) Matl. -
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	-	-	-	-	-	-	-	-	-	-
b	-	-	-	-	-	-	-	-	-	-

If removable bolts used (describe other fastenings) - (Matl., Spec. No. Gr. Size, No.)

- Type of Jacket - Proof Test -
- Jacket Closure - If bar, give dimensions -
(Describe as ogee or weld, bar, etc)
- HAZOP - PSI at max. temp. - Deg. F Min. design metal temp. -20 Deg. F at - PSI
Hydro., pneu., or comb. test press. - PSI

Items 14 and 15 to be completed for tube sections.

- Tubesheets: - Stationary Matl. (Spec. No. Gr.) Diam. (in.) (Subject to Pressure) Nom. Thk. (in.) Corr. Allow. (in.) Attach. Welded, bolted
Floating Matl. (Spec. No. Gr.) Diam. (in.) Nom. Thk. (in.) Corr. Allow. (in.) Attached
- Tubes: - Matl. (Spec. No. Gr.) O.D. (in.) Nom. Thk. (in. or Gage) Number Types (straight or "U")

Items 16-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

- Shell SA2403316 .250 - 3/4" 1'-10-3/4"
Matl. (Spec. No. Grade) Nom. Thk. (in.) Corr. Allow. Diam. O.D. (ft. & in.) Length (Overall) (ft. & in.)
- Seams Long (Dbl., Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (F)
Time Girth (Dbl., Sngl.) R.T. (Spot, Partial or Full) No. of Courses
- Heads: (a) Matl. SA2403316 (b) Matl. -
(Spec. No. Grade) (Spec. No. Grade)

	Location (Top, Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Flat Diameter	Side to Pressure (Convex or Concave)
a	ENDS	.230"	-	-	-	2:1	-	-	CONCAVE
b	-	-	-	-	-	-	-	-	-

If removable, bolts used (describe other fastenings) ALLOY SA193 B7 & SA193-2H 40 (3/4") (NOT SUPPLIED BY DER
Matl. Spec. No., Gr., Size, No.) FOR REFERENCE ONLY

Form U-2 (Back)

19. MAWP 100 PSI a max. temp 50 Deg. F Min. design metal temp. -20 Deg. F at 100 PSI
Hydro., presu., or comb. test press. 150 PSI

Items below to be completed for all vessels where applicable

20. Nozzles, Inspection and Safety Valve Openings:

[illegible]

21. Supports: Skirt NO Lugs - Legs - Other - Attached -
Yes/No (No.) (No.) (Describe) (Where & How)

22. Remarks: BONNET SECTION AND HEAD ONLY

CERTIFICATE OF SHOP 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.
 "U" Certificate of Authorization No. 982 expires 1/31/73.

Date SEP 25 1987 DOYLE & ROTH CO., INC. Signed _____

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by DOYLE & ROTH MFG. CO., INC. at One Horse Avenue, Slacksman PA
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 Pennsylvania and employed by American Mutual Insurance Corp., Worcester, Massachusetts have
inspected the pressure vessel described in this Manufacturer's Data Report on 021 4119 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 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 SEP 25 1992 signed S. D. [Signature] Commission PA2329
(Authorized Inspector) (Natl. Bd. State, Province and Loc.)