

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 Sovereign Stainless Fabricators, Inc. 3114 Riverside Drive Chattanooga, TN 37406
(Name and address of Manufacturer)

Manufactured for SMITH-KOCH

(Name and address of Purchaser)

3. Location of Installation CONSHOCKEN, PENNSYLVANIA

(Name and address)

4. Type: Vertical

(Horiz., vert., or sphere)

Jacketed Vessel

(Tank, separator, jkt. vessel, heat exch., etc.)

2-102

(Mfg's serial No.)

(CRN)

2-102
(Drawing No.)

247
(Nat'l. Bd. No.)

2002
(Year built)

5. ASME Code, Section VIII, Div. 1 2001 EDITION

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 multi-chamber vessels.

6. Shell (a) No. of course(s): 1 (b) Overall length (ft & in.): 2'-0"

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	54 3/4" I.D.	2'-0"	SA-240Tp.304		.1046	----	1	None	70%	--	----	----	----	----

7. Heads: (a) -----

(Mat'l Spec. No., Grade or Type) H.T.-Time & Temp.

(b) -----

(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)	N/A													
(b)														

If removable, bolts used (describe other fastening)

N/A

(Mat'l Spec. No., Grade, size, No.)

8. Type of jacket DIMPLE JACKET

Jacket closure Ogee & Weld

(Describe as ogee & weld, bar, etc.)

If bar, give dimensions

If bolted, describe or sketch.

9. MAWP 150 0 psi at max. temp. 350 ---- °F Min. design metal temp. -20 °F at 150 psi.
(internal) (external) (internal) (external)

10. Impact test NO, CHARPY IMPACT TEST EXEMPT PER UHA-51 at test temperature of °F.

(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. Hydrostatic 210 P.S.I.G. Proof test 11/25/92 BURST UG-101.M ACCEPTED 11/25/92

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: N/A

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: N/A

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): 1 (b) Overall length (ft & in.): 3'-4"

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	54" I.D.	3'-4"	SA-240Tp.304L		3/8"	----	1	None	70%	1	None	70%	----	----

15. Heads: (a) SA-240Tp.304

(Mat'l Spec. No., Grade or Type) H.T.-Time & Temp.

(b) SA-240Tp.304

(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	.2610	----	----	----	2:1	----	----	----	----	----	1	None	85%
(b)	Bottom	.2610	----	----	----	2:1	----	----	----	----	----	1	None	85%

If removable, bolts used (describe other fastening)

N/A

(Mat'l Spec. No., Grade, Size, No.)

Platcom 01-01E00

FORM U-1 (Back)

16. MAWP 150 0 psi at max. temp. 350 ---- °F. Min. design metal temp. -20 °F at 150 psi.
(internal) (external) (internal) (external)
17. Impact test NO, CHARPY IMPACT TEST EXEMPT PER UHA-51 at test temperature of ---- °F.
(Indicate yes or no and the component(s) impact tested)
18. Hydro., pneu., or comb. test press. Hydrostatic 210 P.S.I.G. Proof test N/A
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	
SEE U-4											

20. Supports: Skirt No Lugs ---- Legs 4 Others ---- Attached ----
(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: TANK & DIMPLE JACKET WERE HYDRO-TESTED IN THE VERTICAL POSITION. CONSTRUCTED IN CONFORMANCE WITH APPENDIX 17, DIMPLED OR EMBOSSED ASSEMBLIES.

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. 24,606Expires 02/062005JAN 6-17-02
01mm 6-17-02Date 3/29/02Name Sovereign Stainless Fabricators, Inc.

Signed

Darin Mathis
(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 TN and employed by HSB CT of HARTFORD, CT have inspected the pressure vessel described in this Manufacturer's Data Report on 3-29, 2002, 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 3-29-02

Signed

James R. McLean
(Authorized Inspector)Commissions NB10822A TN2693

(Nat'l Board incl. endorsement, 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 ----

(Assembler)

Signed ----

(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 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.)

$\frac{2}{2}$

NB10822A TN2693
(Nat'l. Board incl. endorsement, state, province and no.)
Platcom 10-98E98