

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

#103884

1. Manufactured and certified by BENDEL CORPORATION, 4823 N. GRAHAM STREET, CHARLOTTE, NC 28269
(Name and address of Manufacturer)

2. Manufactured for KOSA, WILMINGTON, NC
(Name and address of Purchaser)

3. Location of installation SAME AS ABOVE
(Name and address)

4. Type: VERTICAL TANK 6104-2/2 --- 01610499 324 2000
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)

5. ASME Code, Section VIII, Div. 1 98 ED.; A99 --- ---
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): ONE (b) Overall length (ft & in.): 14' - 9"

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	84" O.D.	14' - 9"	SA240-316L		1/4"	0"	1	SPOT	85%	1	SPOT	85%	N/A	N/A

7. Heads: (a) SA240-316L; H.T.: NONE (b) SA240-316L; H.T.: NONE
(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	.28"	0"	84"	5.75"	---	---	---	---		X	S	NONE	
(b)	BOTTOM	.32"	0"	84"	5.75"	---	---	---	---		X	S	NONE	

If removable, bolts used (describe other fastening) N/A

8. Type of jacket N/A Jacket closure N/A
(Mat'l Spec. No., Grade, size, No.)
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions N/A
9. MAWP 75 --- psi at max. temp. 320 --- °F Min. design metal temp. -20 °F at 75 psi.
(internal) (external) (internal) (external)

10. Impact test NO; EXEMPT PER UHA-51 AND UG-20
(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test press. 99 HYDRO Proof test N/A

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.): ---

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

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.
(a)														
(b)														

If removable, bolts used (describe other fastening) ---

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

MAWP _____ psi at max. temp. _____ Min. design metal temp. _____
(internal) (external) (internal) (external) 'F at _____ psi

Impact test _____
(Indicate yes or no and the component(s) Impact tested)

Hydro., pneu., or comb. test press. _____ Proof test _____

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	
MANWAY	1	20"	CL150S-O	SA240-316L	SA105	1/4"	0"	SA240-316L	UW16.1(d)	FIG. 2-4(3)	SHELL
OUTLET, VAPOR	2	6"	CL150L-J	SA240-316L	SA105	SCH. 40	0"	NONE	UW16.1(d)	---	---
INLET	1	6"	CL150L-J	SA240-316L	SA105	SCH. 80	0"	NONE	UW16.1(d)	---	---
LEVELS, RELIEF	4	3"	CL150L-J	SA240-316L	SA105	SCH. 40	0"	NONE	UW16.1(d)	---	---
INLET	2	2"	CL150L-J	SA240-316L	SA105	SCH. 40	0"	NONE	UW16.1(d)	---	---
TEMPERATURE	2	1-1/2"	CL150L-J	SA240-316L	SA105	SCH. 40	0"	NONE	UW16.1(d)	---	---
PRESSURE	1	1"	CL150L-J	SA240-316L	SA105	SCH. 80	0"	NONE	UW16.1(d)	---	---

Supports: Skirt _____ NO _____ Lugs _____ 4 _____ Legs _____ --- _____ Others _____ --- _____ Attached _____ WELDED TO SHELL
(Yes or No) (No.) (No.) (Describe) (Where and How)

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)

N/A

Remarks: VESSEL NOT DESIGNED FOR LETHAL SERVICE; VESSEL TESTED IN HORIZONTAL POSITION; SAFETY RELIEF DEVICE IS RESPONSIBILITY OF OWNER; VESSEL CONTENTS UNKNOWN. (T-6207)

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. 28314 Expires MAY 1, 2001

Date 4/3/00 Name BENDEL CORPORATION Signed [Signature]
(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 the State or Province of NC and employed by FACTORY MUTUAL INSURANCE COMPANY of JOHNSTON, RI have inspected the pressure vessel described in this Manufacturer's Data Report on 4-3, 19 00, 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 4-3-00 Signed [Signature] Commissions NB9465A NC 10 10
(Authorized Inspector) (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 _____, 19 _____

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