

A-ASME-123D-230
M U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
 As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

Item No. 123D-230
 # 87895 ✓
 P.O. No. E4446-M0014

TEX PV Serial No:
00-123-00-1666
Item No.: 123D-230
SAP No.: 70423285
Job No.: B2741

1. Manufactured and certified by Entex Fabrication, Inc., 1010 Texowa Road South, Iowa Park, TX 76367
(Name and address of Manufacturer)
2. Manufactured for S & B Engineers & Constructors Ltd., 3535 Sage Rd., Houston, TX 77056
(Name and address of Purchaser)
3. Location of Installation Eastman Chemical Company, Callahan Rd., Longview, TX 75602
(Name and address)
4. Type: Vertical Vessel 3493A n/a 3493A-1 Rev. 4 867 1999
(Horiz., vert., or sphere) (Tank separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)
5. ASME Code, Section VIII, Div. 1 1995 A96 n/a n/a
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): 6 (b) Overall length (ft & in.): 26'-0"

No.	Course(s)		Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
	Diameter, in.	Length (ft & in.)		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
2	36" I.D.	10'-0"	SA-240-304/304L	3/8"	n/a	1	Spot	85	1	Spot	85	n/a	n/a
1	36" x 18"	1'-4"	SA-240-304/304L	3/8"	n/a	1	Spot	85	1	Spot	85	n/a	n/a
3	18" O.D.	14'-8"	SA-312TP-304/304L	1/4"	n/a	n/a	n/a	85	1	Spot	85	n/a	n/a

7. Heads: (a) SA-312TP-304/304L (b) SA-312TP-304/304L
(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		Eff.
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	
(a) Bottom	5/16"	n/a	n/a	n/a	2:1	n/a	n/a	n/a	n/a	yes	n/a	n/a	85
(b) Top	3/16"	n/a	n/a	n/a	2:1	n/a	n/a	n/a	n/a	yes	n/a	n/a	85

If removable, bolts used (describe other fastening) ++ (32) 1-1/8"(8)NC x 6-1/2" lg. SA-193-B7, SA-194-2H
(Mat'l Spec. No., Grade, Size, No.)

8. Type of jacket n/a Jacket closure n/a
(Describe as ogee & weld, bar, etc.)
 If bar, give dimensions n/a If bolted, describe or sketch.

9. MAWP 166 15 psi at max. temp. 400 400 ° F Min. design metal temp. -20 ° F at 201 psi.
(internal) (external) (internal) (external)

10. Impact test Exempt per UHA-51(b)
(indicate yes or no and the component(s) impact tested)

11. Hydro., ~~hydro.~~, or ~~vacuum~~ test press 312 Proof test n/a

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: n/a n/a n/a n/a n/a
Stationary (Mat'l Spec. No.) Dia., in (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)
n/a n/a n/a n/a
Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: n/a n/a n/a n/a 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): n/a (b) Overall length (ft & in.): n/a

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

15. Heads: (a) n/a (b) n/a
(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		Eff.
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	
(a)													
(b)													

If removable, bolts used (describe other fastening) n/a
(Mat'l Spec. No., Grade, Size, No.)

S & B Engineers & Constructors, Ltd.
ACCEPTED DATA
 By: MDB
 Date: 10/4/99

S & B JOB: E4446
 PKG: 452
 CTL: M0014-034
 RCPT: 1 TYPE: ASME
 SEQ: 300

16. MAWP n/a (internal) n/a (external) psi at max. temp. n/a (internal) n/a (external) ° F Min. design met. n/a ° F at n/a psi.

17. Impact test n/a (Indicate yes or no and the component(s) impact tested)

18. Hydro., ~~press.~~ or ~~comb.~~ test pressure n/a 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	
* Manway	1	18"	RFSO	SA-240-304/304L	SA-182F-304/304L	.375"	n/a	n/a	welded	welded	Shell
* Control	2	8"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.322"	n/a	n/a	welded	welded	Shell
* Control	2	6"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.280"	n/a	n/a	welded	welded	Head
* Control	2	4"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.237"	n/a	n/a	welded	welded	Shell
* Control	3	3"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.216"	n/a	n/a	welded	welded	Hd/SHI
* Control	5	2"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.154"	n/a	n/a	welded	welded	Shell
* Control	12	1-1/2"	RFSO	SA-312TP-304/304L	SA-182F-304/304L	.145"	n/a	n/a	welded	welded	Shell

20. Supports: Skirt Yes (Yes or No) Lugs n/a (No) Legs n/a (No) Others n/a (Describe) Attached welded to bottom head (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)
n/a

22. Remarks: * 150 Lb RFSO SA-182F-304/304L

++ 18" 150 Lb RFSO SA-182F-304/304L

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. 17935 Expires Sept. 14, 2000
Date 09/21/99 Name Entex Fabrication, Inc. (Manufacturer) Signed [Signature] (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 Texas and employed by ABS Group, Inc. of Houston, Texas have inspected the pressure vessel described in this Manufacturer's Data Report on August 27, 1999, 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 9/24/99 Signed [Signature] (Authorized Inspector) Commissions NB 9502(B), Tx. 1082 (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 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.)