

87898

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 Dusenbery Engineering Co., Inc. 309 E. Hanover Ave. Morristown, NJ 07962
(Name and address of Manufacturer)
2. Manufactured for Koch Process Technologies, Inc. Parsippany, NJ 07054
(Name and address of Purchaser)
3. Location of installation Texas Eastman Div. Eastman Chemical Co. Longview, TX
(Name and address)
4. Type: Vertical Karr Extraction Column 1544A
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Mfg's serial No.)
- D-0410-08-01, R1 3528 1998
(CRN) (Drawing No.) (Mat'l. Bd. No.) (Year built)
5. ASME Code, Section VIII, Div. 1 1995 Ed., 12/97 Add. - None
Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

REP: 1
TYPE: ASME
JOB: E4446
PKG: 2108
CIT: H0013-023
S&B Job Number: E4446

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): 8 (b) Overall length (ft & in.): 53'-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
See Form U-4 Supplementary Sheet														

7. Heads: (a) SA-240-304 (b) SA-240-304
(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)	Top	1 1/2"	-	-	-	-	-	-	25"	Both	S	-	100%	
(b)	Bottom	215"	-	40"	3"	-	-	-	-	X	X	S	-	85%

If removable, bolts used (describe other fastening) Top: (24) 3/4" dia. SA-193-B7 Studs w/SA-194-2H Nuts.
(Mat'l Spec. No., Grade, size, No.)

8. Type of jacket N/A Jacket closure _____
(Describe as cage & weld, bar, etc.)

If bar, give dimensions _____ If bolted, describe or sketch.
9. MAWP 50 FV psi at max. temp. 400 400 °F Min. design metal temp. -20 °F at FV or 50 psi.
(internal) (external) (internal) (external)

10. Impact test No, exempt per para. UHA-51(d)&(e).
(Indicate yes or no and the component(s))

11. Hydro., pneu., or comb. test press. 112 PSIG Proof test _____

Items 12 and 13 to be completed for tube sections. N/A

12. Tubesheet: _____
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in.
Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in.

13. Tubes: _____
Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in.

Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers. N/A

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
See Form U-4 Supplementary Sheet														

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		Eff.
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	
(a)														
(b)														

If removable, bolts used (describe other fastening) _____
(Mat'l Spec. No., Grade, size, No.)

TEX PV Serial No:
00-123-00-1669
Item No.: 123D-260
SAP No.: 70423288-260
Job No.: B2741

S & B P.O. Number: E4446-M0013
Client: Texas Eastman
Longview, Texas

S & B Engineers & Constructors, Ltd.
ACCEPTED DATA
By: [Signature]
Date: 11-23-98

CONSTRUCTION RECORDS
RELEASED TO THE CONSTRUCTION DEPT.
AS BUILT
DATE: 11/17/98
EV

#87898

FORM U-1 (Back)

16. MAWP _____ psi at max. temp. _____ °F. Min. design metal temp. _____ °F at _____ psi.

17. Impact test _____ [Indicate yes or no and the component(s) impact tested]

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

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	2	18"	150#SO	SA240	SA182	1/4"	-	Integral	UW-16.1e	DFW	Shell
Outlet	1	3"	"	SA312	"	Sch40	-	-	"	"	Bot.Hd
Misc.	7	3"	"	"	"	"	-	-	"	"	"
"	4	2"	"	"	"	"	-	-	"	"	"
"	6	1 1/2"	"	"	"	"	-	-	"	"	"

20. Supports: Skirt No Lugs 4 Legs - Others - Attached Welded to belly band.

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: Vessel tested in horizontal position. Vessel used for chemicals. Liquid penetrant examination performed on all inside nozzle-to-shell welds per customer requirement.

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. 1,005 Expires 3/31 2001
Date 10/8/98 Name Dusenbery Engineering Co., Inc. Signed William James

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 of NJ and employed by Commercial Union Insurance Company of Boston, MA have inspected the pressure vessel described in this Manufacturer's Data Report on 10/8, 19 98, 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 10/8/98 Signed [Signature] Commissions NB 7169, B, NJ 499

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 _____

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 _____ Commissions _____

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FORM U-4 MANUFACTURERS' DATA REPORT SUPPLEMENTARY SHEET
as required by the provisions of the ASME Code rules, Section VIII, Division 1

1. Manufactured and certified by Dusenbery Engineering Co., Inc. 309 E. Hanover Ave.
(name and address of manufacturer) Morristown, NJ 07962
2. Manufactured for Koch Process Technologies, Inc. Parsippany, NJ 07054
(name and address of purchaser)
3. Location of Installation Texas Eastman Div. Eastman Chemical Co. Longview, TX
(name and address)
4. Type: Vert. Column 1544A - D-0410-08-01,R1 3528 1998
(horiz., vert., tank, etc.) (mfr's. serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)

Data Report Item Number 6. Remarks Shell

OD Course(s)			Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length (ft & in.)		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	24"	0'-4"	SA240T304	1/4"	-	1	Spot	85%	1&4	Spot 85%	55%	-	-
2	24x20"	1'-2"	"	3/16"	-	1	"	"	1	"	85%	-	-
3&8	40"	7'-0-5/8"	"	1/4"	-	1	"	"	1	"	"	-	-
4&7	40x20"	1'-5-3/8"	"	3/16"	-	1	"	"	1	"	"	-	-
5	20"	14'-5"	SA312T304.218"	"	-	*	None	"	1	"	"	-	-
6	20"	20'-1"	"	"	-	*	"	"	1	"	"	-	-

* Welded pipe.

Date 10/8/98 Name Dusenbery Engineering Co., Inc. Signed [Signature]
(manufacturer) (representative)
Date 10/8/98 Signed [Signature] Commissions NB 7169, B, NJ 499
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)