2al spec

67-796 (1)

FORM U-1 MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS

As required by the Provisions of the ASME Code Rules 401118A01 Asty #401117A01

1. Manufactured by Votator Division, Chemetron Corporation - Louisville, Kentucky (Name and address of manufacturer)

2. Manufactured for ______ (Name and address of Purchaser)

3. Type Vertical (Horiz or Vert.) Kind Jacketed (Tank, Jacketed, Heat Exch.) Vessel No. (A-1560) (Mfrs. Serial) (______) (State & State No.) Natl. Bd. No. 2701 Yr. Built 1967

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL: Material SA-285-Gr C (Kind and Spec. No.) T.S. 55,000 (Fig or F.B. & Spec. Min. T.S.) Nominal Thickness 5/16 In. Corrosion Allowance per UW12(c) In. Diam. 5 Ft. 6 In. Length 5 Ft. 9 1/4 In.

5. SEAMS: Long Butt-Weld (Welded, Dbl, Single, Lap, Butt) H.T. No (Yes or No) X.R. No (Spot or Complete) Sectioned No (Yes or No) Efficiency 65 %

(2) Girth Butt-Weld H.T. No X.R. No Sectioned No No. of Courses 3

If riveted describe seams fully on reverse side of form

6. HEADS: (a) Material SA-285-Gr C T.S. 55,000 (b) Material ______ T.S. ______

Location Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) Top & Bottom	1"	(Tube and flgs.)					42 1/4"	
(b)								

If removable, bolts used ______ Other fastening ______ (Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. STAYBOLTS: ______ (Material) If hollow ______ (Size of Hole) Attachment ______ (Threaded, Welded) Pitch ______ (Horiz.) X ______ (Vert.) Diam. ______ (Nominal)

8. JACKET CLOSURE: ASME Flged., dished & flued heads, welded 5/16" thk., SA285-Gr C (Describe as ogee & weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

9. Constructed for max. allowable working press.[1] 100 psi at max. temp. 400 °F. Min. temp. (when less than -20°) ______ °F. Hydrostatic Test Press. 175 psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material ______ (Kind & Spec. No.) Diam. ______ In. (Subject to Pressure) Thickness ______ In. Attachment ______ (Welded, Bolted)

Floating Material ______ (Kind & Spec. No.) Diam. ______ In. Thickness ______ In. Attachment ______

11. TUBES. Material ______ (Kind & Spec. No.) O.D. ______ In. Thickness ______ Inches or Gage Number ______ Type ______ (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL: Material SA-240 GR 316L (Kind and Spec. No.) T.S. 70,000 (Fig. or F.B. & Spec. Min. T.S.) Nominal Thickness .500 In. Corrosion Allowance 0 In. Diam. 3 Ft. 1 3/16 In. Length 6 Ft. ______ In.

13. SEAMS: Long Dbl. Butt-Weld (Welded, Dbl, Single, Lap, Butt) H.T. No X.R. Complete (Spot or Complete) Sectioned No (Yes or No) Efficiency 100 %

Girth Butt & lap H.T. No X.R. No Sectioned No No. of Courses 3

If riveted describe seams fully on reverse side of form

14. HEADS: (a) Material ______ T.S. ______ (b) Material ______ T.S. ______ (c) Material ______ T.S. ______

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) Top, bottom, ends								
Channel								
Floating								

If removable, bolts used (a) ______ (b) ______ (Material, Spec. No., T.S., Size, Number) Other fastening ______ (Describe or Attach Sketch)

15. Constructed for max. allowable working press.[1] Int. 15 P.S.I. or Full Vac @ 400°F. Ext. 100 psi at max. temp. 400 °F. Min. temp. (when less than -20°) ______ °F. Hydrostatic Test Press. 175 psi.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 3 Size 2" N.P.S. Location Top side each jacket

17. NOZZLES:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Inlets	3	2"	Pipe	SA-106-Gr B	Sch. 40		Welded
Outlets	9	(6) 1" & (3) 2"	"	" "	"	"	"

18. INSPECTION OPENINGS: Manholes, No. ______ Size ______ Location ______

Handholes, No. ______ Size ______ Location ______

Threaded, No. ______ Size ______ Location ______

19. SUPPORTS: Skirt No (Yes or No) Lugs ______ (Number) Legs ______ (Number) Other End flgs. (Describe) Attached to tube-Welded (Where & How)

20. REMARKS: Jacketed thermal sections for rotary type processor. Constructed per ASME Code, Section 8 for U.P.V.

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part) (Over)

[2] If postweld heat-treated.

[1] List other internal or external pressures with coincident temperature when applicable.

FORM U-1 (back)

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 Unfired Pressure Vessels.

Date OCT 16 1967 Signed Votator Division, Chemetron Corp. By
(Manufacturer)

Certificate of Authorization Expires December 31, 1970

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Votator Division, Chemetron Corp. - at Louisville,

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Kentucky and employed by Hartford Steam Boiler Inspection & Insurance Company of Hartford, Connecticut have inspected the pressure vessel described in this manufacturer's data report on OCT 16 1967 19 , and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

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 OCT 16, 1967

Raymond C. White
Inspectors Signature Commissions N/B No. 5818 Ky-214
Nat'l Board or State and No.

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 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 that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code. 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 19

Inspectors Signature Commissions
Nat'l Board or State and No.

Printed in U.S.A. (Local) Copies of this Form obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017

P.O. 2334-10

EQUIPMENT DESIGN SPECIFICATION

NO. REQ'D.: One
ITEM NO.: D-1

"RODNEY HUNT" STRIPPER

Service and Design Conditions:

1.	Type of Equipment:	Model No. 36-216 "TURBA-FILM" Processor as manufactured by the Votator Div. of Chemetron Corp.
*2.	Process Feed To Stripper:	10,000 lbs./hr. at ambient (60°F.Min) *65.5 to 59.5% carbon tetrachloride *34.5 to 40.5% Heptachlor.
3.	Materials:	All parts exposed to the process fluids shall be Type 316L stainless steel. Jackets shall be ASTM A-285, Grade C, carbon steel.
4.	Code Requirements:	ASME-UPV, design test inspection and stamp Tennessee certification.
5.	Design Pressure and Temperature:	Vessel: 15 psig and full vacuum at 400°F. Jacket: 100 psig coincident with full vacuum in vessel at 400°F.
*6.	Operating Pressure and Temperature:	Vessel: 40mm Hg. Abs. at 250°F. *Jacket: Approx. 15 psig at 250°F. to 259°F. dry saturated steam.
7.	Radiograph Inspection:	Inner shell.
8.	Blade Clearance Rotor to Shell:	0.040-0.060"
9.	Surface Finish:	*Steam Section: #80 *Rotor: #1
10.	Heat Transfer Surface Area:	151 sq. ft. net
11.	Rotor Speed:	265 RPM
12.	Gaskets:	Silicone "Ø" rings.
13.	Mechanical Seals:	Double seals, top and bottom.
14.	Nozzle Connections:	Flanged: Sch. 80 pipe nipples with 150 lb. ASA Std. flange. Screwed: 3000 lb. forged, NPT screwed.
15.	Supports:	Mfr. Std.
16.	Appurtenances Required:	1-20" flanged vapor outlet 2-2" flanged feed inlets ≠1-6" flanged bottom outlet with 2-1" flanged thermowell nozzles. 3-2" flanged steam inlet 3-2" flanged condensate outlets

JUN 21 1967

PREP. BY: WAH 3/6/67	APP'D.	DATE	HOYER - SCHLESINGER - TURNER
CH'K'D BY:			"RODNEY HUNT" STRIPPER
DATE // Rev. 3	6/15/67		
REVISION *Rev. 1 ≠Rev. 2	3/27/67 5/22/67		PROJ. No. 2334 | ACCT. D | SH. 1 OF 3 | SPEC. No. 21-417

EQUIPMENT DESIGN SPECIFICATION

NO. REQ'D.: One
ITEM NO.: D-1

"RODNEY HUNT" STRIPPER (Cont'd.)

Service and Design Conditions:

16. Appurtenances Required: (Cont'd.)
3-2" flanged safety valve connections.
≠6-1" flanged instrument connection.
2-3/8" screwed, top seal fluid connections.
2-1/4" screwed, bottom seal fluid connection.
All nozzles shall be shipped with blind flanges and gaskets on all flanged nozzles and screwed plugs in threaded nozzles.

17. Rotor Drive:
Integrally mounted "Intedrive" Direct gear. A 54 HP hydraulic motor driver will be furnished by *purchaser and mounted by the Mixer Vendor. This motor will be operated by a 2000 psig hydraulic fluid system. A field mounted hydraulic drive control panel will be furnished by the purchaser. This panel will include a flow control device to limit the input speed to the gear drive to 400 RPM min. The hydraulic system has capacity to supply 2000 psig hydraulic fluid to drive a gear lube pump and seal fluid circulating pump. Seal cooling, if required, shall be in the seal jacket.

18. Insulation:
*By others.

19. Electrical:
If any electrical components are supplied with the equipment, they shall be Class 1, Grade D, explosion-proof.

20. Painting:
One shop coat of Rowe "Hypoloid" primer on exterior carbon steel surfaces.

PREP. BY: WAH 3/6/67	APP'D.	DATE	HOYER - SCHLESINGER - TURNER
CH'K'D BY:			"RODNEY HUNT" STRIPPER
DATE.			
REVISION: *Rev. 1 ≠Rev. 2	3/27/67 3/22/67		PROJ. No. 2334 | ACCT. D | SH. 2 OF 3 | SPEC. No. 21-417

EQUIPMENT DESIGN SPECIFICATION

NO. REQ'D.: One
ITEM NO.: D-1

"RODNEY HUNT" STRIPPER (Cont'd.)

Service and Design Conditions:

21.	Weights:	Bidder shall furnish weight of equipment empty, and full of water with his quotation.
22.	Service Location:	Outdoor
23.	References:	Votator Division Dwg. No. CL 348S
24.	Remarks:	1. Present operation with a Model 30-120 unit shows a 10 ampere current draw on approximately the same composition of process feed liquid.
		//≠2. Tapped and plugged temperature indicator connection shall be furnished and located at the top and bottom rotor bearings.

PREP. BY: WAH 3/6/67	APP'D.	DATE	HOYER - SCHLESINGER - TURNER
CH'K'D BY:			"RODNEY HUNT" STRIPPER
DATE. *Rev. 1 ≠Rev. 2	3/27/67 5/22/67		
REVISION //Rev. 3	6/15/67		
PROJ. No. 2334	ACCT. D	SH. 3 OF 3	SPEC. No. 21-417

RRBH 23723

EQUIPMENT RECORD

ITEM Rodney HUnt stripper

PURCHASED FROM:

Rotor drive:
54 HP hyd. drive 2000 psig

PURCHASE ORDER NO:

SERIAL NO.

MODEL NO. 36-216 "Turba film"

INVENTORY NO: D-1

MANUFACTURER: Votator Div. of ~~[illegible]~~
Chemetron Corp
RCF. File # 42

TYPE Operating press and temp:

SHAFT Vessel 40mm hg. abs. at 250°F

KNIFE Jacket Approx. 15 psig at 250°F

SHAFT SEAL to 259°F dry saturated steam

PLOW PLATE

HP REQ.

SCREENS (INNER) Blade clearance rotor to shell: (OUTER) 0.040-0.060

SPRAY NOZZLE Rotor speed 265 RPM

BELTS

(FINE)

FILTERS Nozzle connections: Flanged: Sch 80 pipe nipples with 150# ASA std flange

CORES

OIL (TYPE)

CAPACITY

Screwed: 3000 lb. forged NPT screwed

MAT'L OF CONST. 316 L SSM'ls exposed to process fulids
~~Jacket ASTM A-285~~

CAPACITY (QT'S)

GENERAL (RELAYS, TIMERS, AUTO. VALVES, ETC.) –

HYDRAULIC SYSTEM

Code req. ASME-UPV

Design press and temp: Vessel 15 psig and full vac. at 400°F

Jacket 100 psig coincident with full vac in vessel @ 400°F

DATE	LOCATION - APPLICATION - AND TRANSFER DATA		
1968	Rodney Hunt Stripper		

ITEM Rodney Hunt Stripper D-1

EQUIPMENT NO. 160-055