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

Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only

1. Manufactured by Wyatt Industries, Inc., Dallas, Texas
(Name and address of Manufacturer)

2. Manufactured for Celanese Chemical Company
(Name and address of Purchaser)

3. Type Horiz (Horiz. or Vert.) Vessel No. (60-D-2495) (Mfrs. Serial) ( ) (State & State No.) Natl. Bd. No. _____ Yr. Built 1960

4. SHELL: Matl. A240 T-304 (Kind and Spec. No.) T.S. 75,000 (Fig. or F.B. & Spec. Min. T.S.) Nom Thk. 1/4 Corr. Allow. 1/16 In. Diam. 8 Ft. 0 In. Lgth. 10 Ft. 0 In.

5. SEAMS: Long Dbl. Butt (Welded, Dbl., Single, Lap, Butt) S.R. No (Yes or No) X.R. No (Spot or Complete) Sectioned No (Yes or No) Efficiency 70 %
Girth Dbl. Butts S.R. No X.R. No Sectioned No No. of Courses 2
If riveted or brazed describe seams fully under remarks.

6. HEADS: (a) Material A240 T-304 T.S. 75,000 (b) Material A240 T-304 T.S. 75,000

	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)	Ends	3/8" Min.	96"	5-7/8"					Concave
(b)									

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

7. Constructed for ~~(Int.)~~ (Ext.) pressure of 37 psi. Max. Temp. 400 °F. Subzero -20 °F. Hydrostatic Test 102 psi.

8. ~~SAFETY OR RELIEF VALVE OUTLETS:~~ Number _____ Size _____ Location _____

9. NOZZLES: SEE ATTACHED SCHEDULES OF OPENINGS

Purpose (Inlet Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

10. INSPECTION OPENINGS Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

*95741

11. SUPPORTS: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other Saddles (Describe) Attached No (Where & How)

12. REMARKS: 8' 0" O.D. x 10' 0" S-S Higher Acrylic Unit
Item # V-370 Dwg. # E-11662

(Brief description of purpose of the vessel, as Air Tank, Water Tank, L.P.G., Etc.—State Contents.)

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this vessel conform to the ASME Code for Unfired Pressure Vessels.

Date 9-29- 19 60 Signed Wyatt Industries, Inc. (Manufacturer) By W. A. Hart

Certificate of Authorization Expires December 31, 1961

CERTIFICATE OF SHOP INSPECTION

Inspection Agency's Serial No. 54730

VESSEL MADE BY Wyatt Industries, Inc. at Dallas, Texas

I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in THE STATE OF TEXAS and employed by Hartford Steam Boiler I & I of Conn, inspected internally and externally, the vessel described in this report on _____ 19____, and certify that the statements made in this report are correct corresponding with mill test reports of materials furnished by the builders, and measurements made of the vessel and that this vessel is constructed in accordance with the ASME Code for Unfired Pressure Vessels.

Date 9-29- 19 60

Inspector's Signature _____ Commissions Texas Comm. # 248 State or Natl. Bd. & Number

MANUFACTURED BY

WYATT INDUSTRIES, INC.

HOUSTON - CORPUS CHRISTI - DALLAS

[U]

W

MAX. WORKING PRESSURE: 37 P.S.I.G. @ 9 FULL VAC. @ 200 °F

MAX. TEMP: 400 °F

MANUFACTURER SERIAL NO.: 60-D-2495

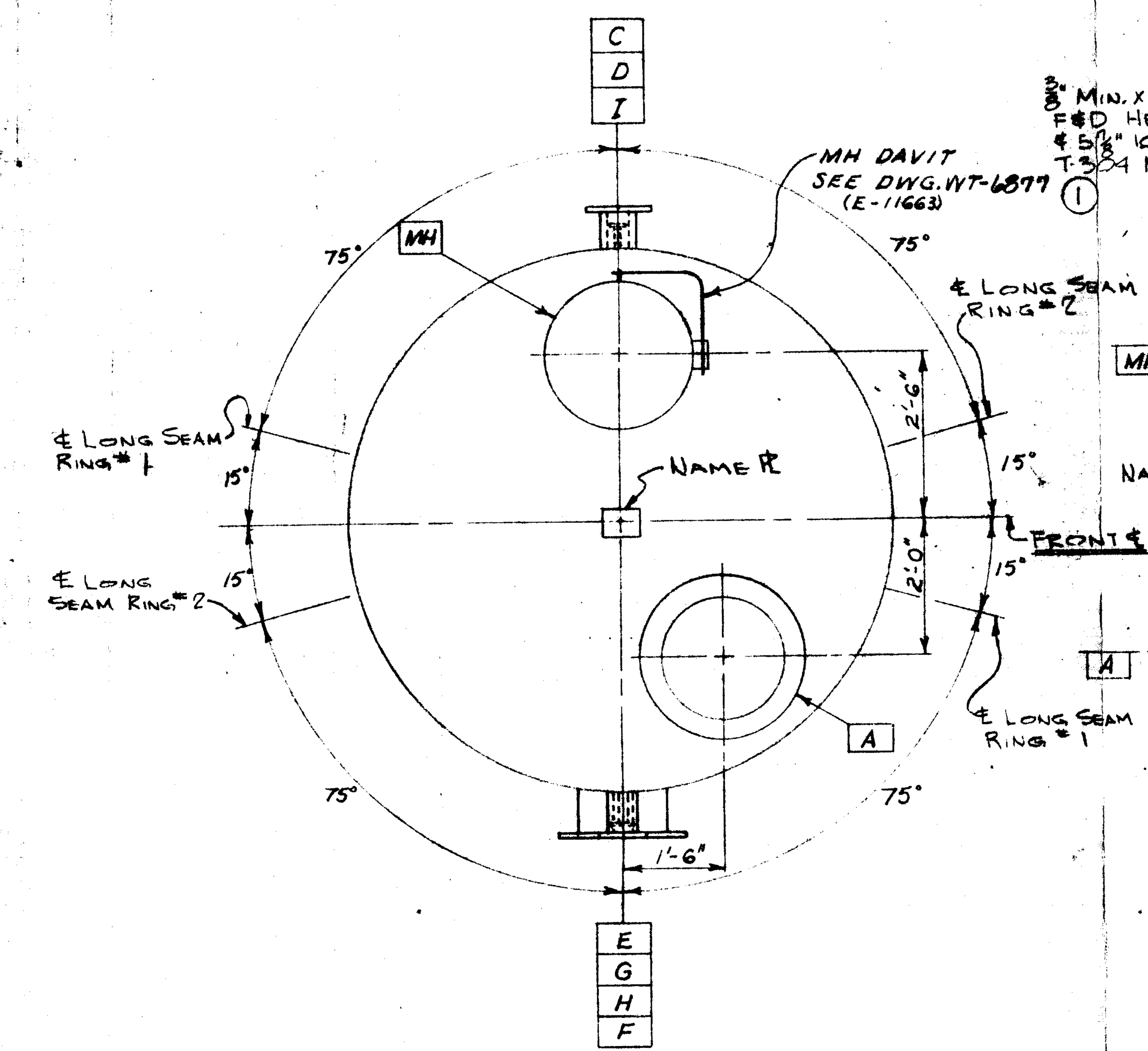
H.S.B. NO.: 54730

ITEM NO. V-370

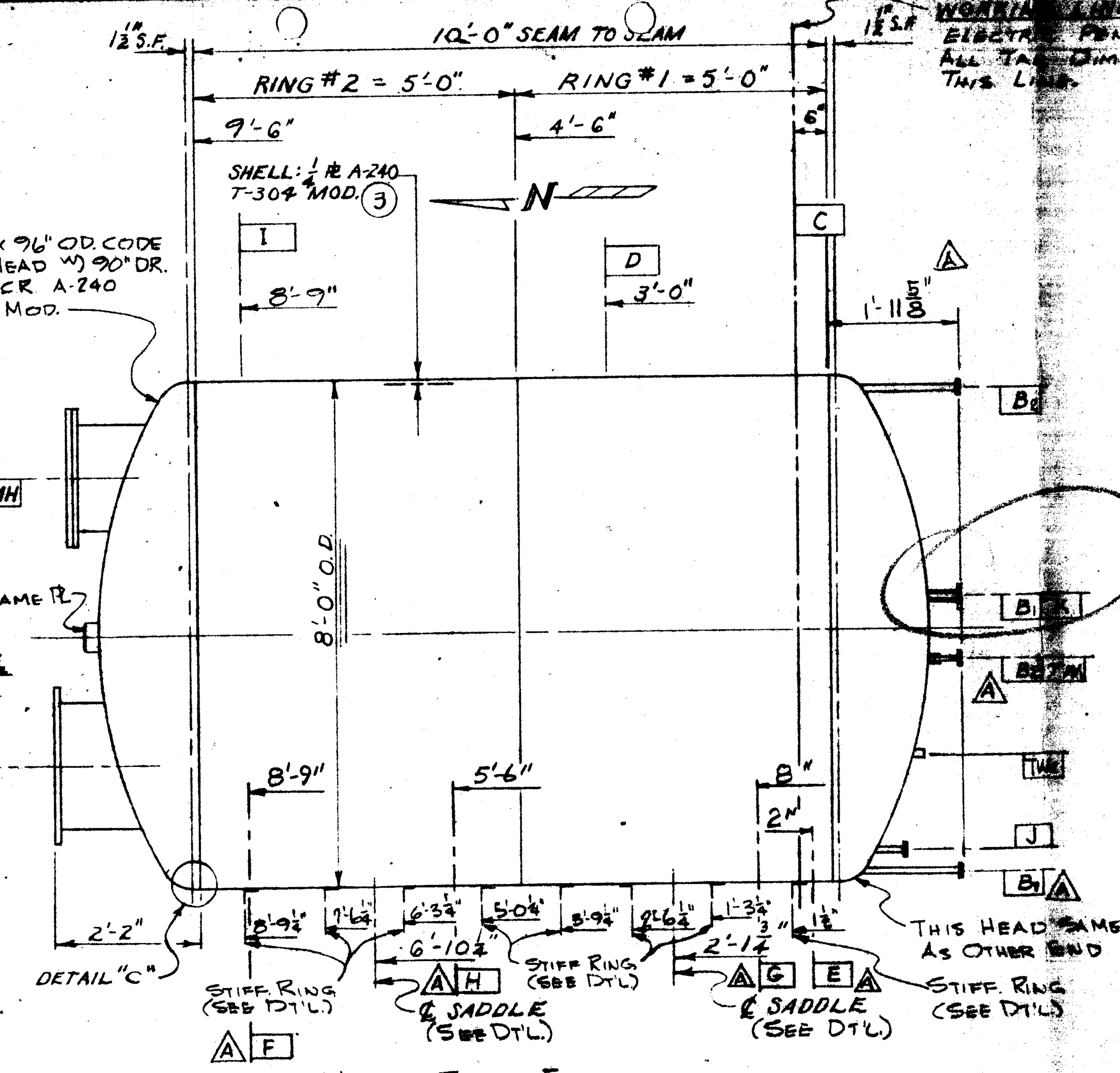
YEAR BUILT: 1960

P.O. NO. 21-829-0

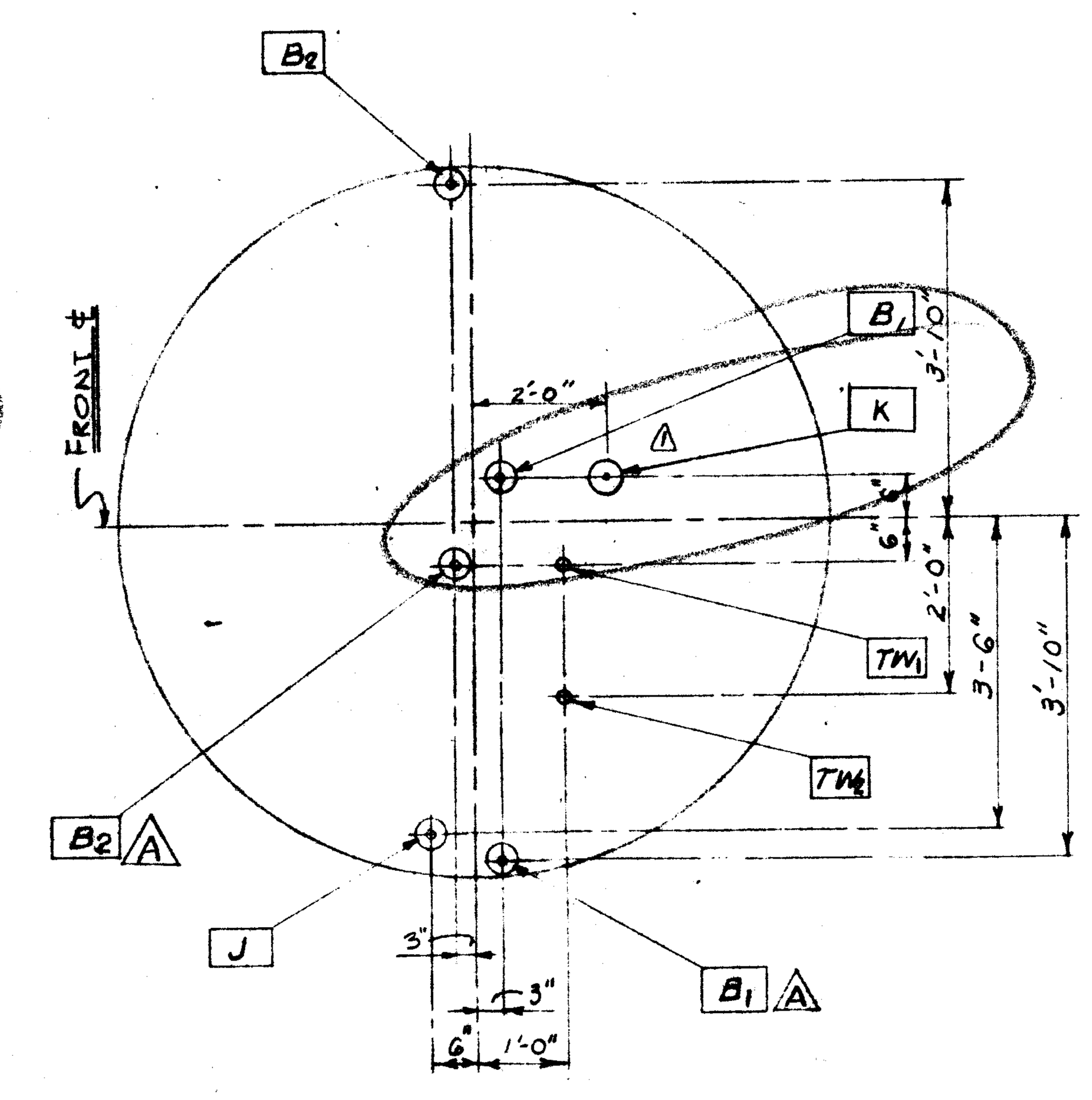
#95741



NORTH END ELEVATION



WEST SIDE ELEVATION



SOUTH END ELEVATION

MARK	QUANTITY	SIZE	FLANGE TYPE	FLANGE RATING	FLANGE MAT'L.	NOZZLE SCH.	NOZZLE MAT'L.	SERVICE	REMARKS
A	1	24"	L.J.	150#	C.S.	3/8 ℞	S.S.	HEATER	
B & B2	2 EA.	3/4"	WNFF	150#	S.S.	160	S.S.	L.G.	
C	1	6"	L.J.	150#	C.S.	5/16" ℞	S.S.	VAPOR OUT	
D	1	1"	WNFF	150#	S.S.	160	S.S.	FUEL GAS	
E	1	4"	L.J.	150#	C.S.	1/4" ℞	S.S.	TO PUMP	
F	1	16"	L.J.	150#	C.S.	1/4" ℞	S.S.	CLEAN OUT	
G	1	2"	WNFF	150#	S.S.	160	S.S.	H_2O RETURN	
H	1	3"	L.J.	150#	C.S.	1/4" ℞	S.S.	CIRCULATION	
I	1	4"	L.J.	150#	C.S.	1/4" ℞	S.S.	SAFETY V.	
J	1	3/4"	WNFF	150#	S.S.	160	S.S.	SPARE	
K (△1)	1	2"	WNFF	150#	S.S.	80	S.S.	FEED	
MH	1	20"	FAB.	150#	S.S.	3/8" ℞	S.S.	MANHOLE	
TWI	1 EA.	1 1/2"	WELD IN TYPE			—	S.S.	T.W.	T.W. # 47

DESIGN DATA

1. ASME Code for Unfired Pressure Vessels, Section VIII, Edition 1959
2. Additional Specifications: Celanese Purchasing Specs.
3. Code Symbol to be Applied per Par UG 116
4. Design Pressure 37 PSIG plus necessary stiffening rings for full vacuum at 200° °F
5. Design Temperature 400° °F.
6. Corrosion Allowance 1/16" inches.
7. Type of Heads. F & D
8. Stress Relief Required NONE
9. Radiograph Required NONE
10. Joint Efficiency: Head 100 % Shell Longitudinal 70 %
11. Maximum allowable Working Pressure (no corrosion allowance)
    Limited by SHELL 68 psi @ 100° F.
    Limited by SHELL 49 psi @ 400 °F.
12. Hydrostatic Test Pressure 102 psi
13. Weight Empty 8,762 lbs.
14. Weight full of Water 46,005 lbs.
15. Design Wind Velocity 100 mph.
16. Shipping Weight 8,762 lbs.
17. Inspection by Hartford S.B.I. & I. & Customer
18. N.S.B. # 54730 Mfg. Serial # 60-D-2495

MATERIAL SPECIFICATIONS

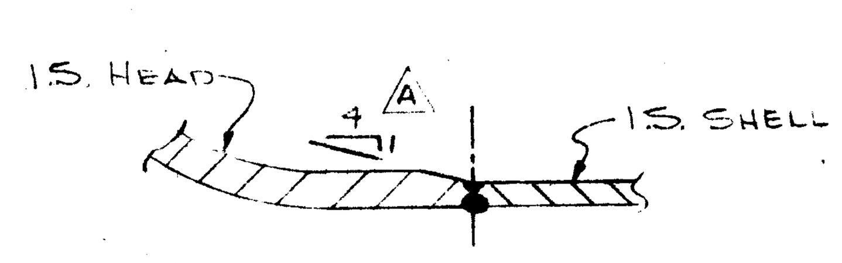
1. Shell ASTM A-240 T-304 MOD.*
2. Head ASTM A-240 T-304 MOD.*
3. Flanges ASTM A-182 F-304 MOD.* & A-181-GR1
4. Nozzle Necks ASTM A-240 T-304 MOD* & A-312 TP-304 MOD*
5. Nozzle Reinforcing ASTM A-212-B ~~F-Box~~
6. Pressure Bolting ASTM A-193 GR. B7 Nuts ASTM A-194 GL.2H
7. ~~Internals ASTM~~ —
8. Skirt and Base ASTM A-283-C (SADDLES)
9. Stiffener Rings ASTM A7
10. Gaskets J.M. 60 (UNGRAPHITED)
11. Paint CS PARTS ONLY, APPLY ONE C/C RED METAL PRIMER, J.B. # 985**
12. Weld Rod ASTM SEE WELD ROD NOTES BELOW

* MODIFIED TO CELANESE PURCHASING SPECS.

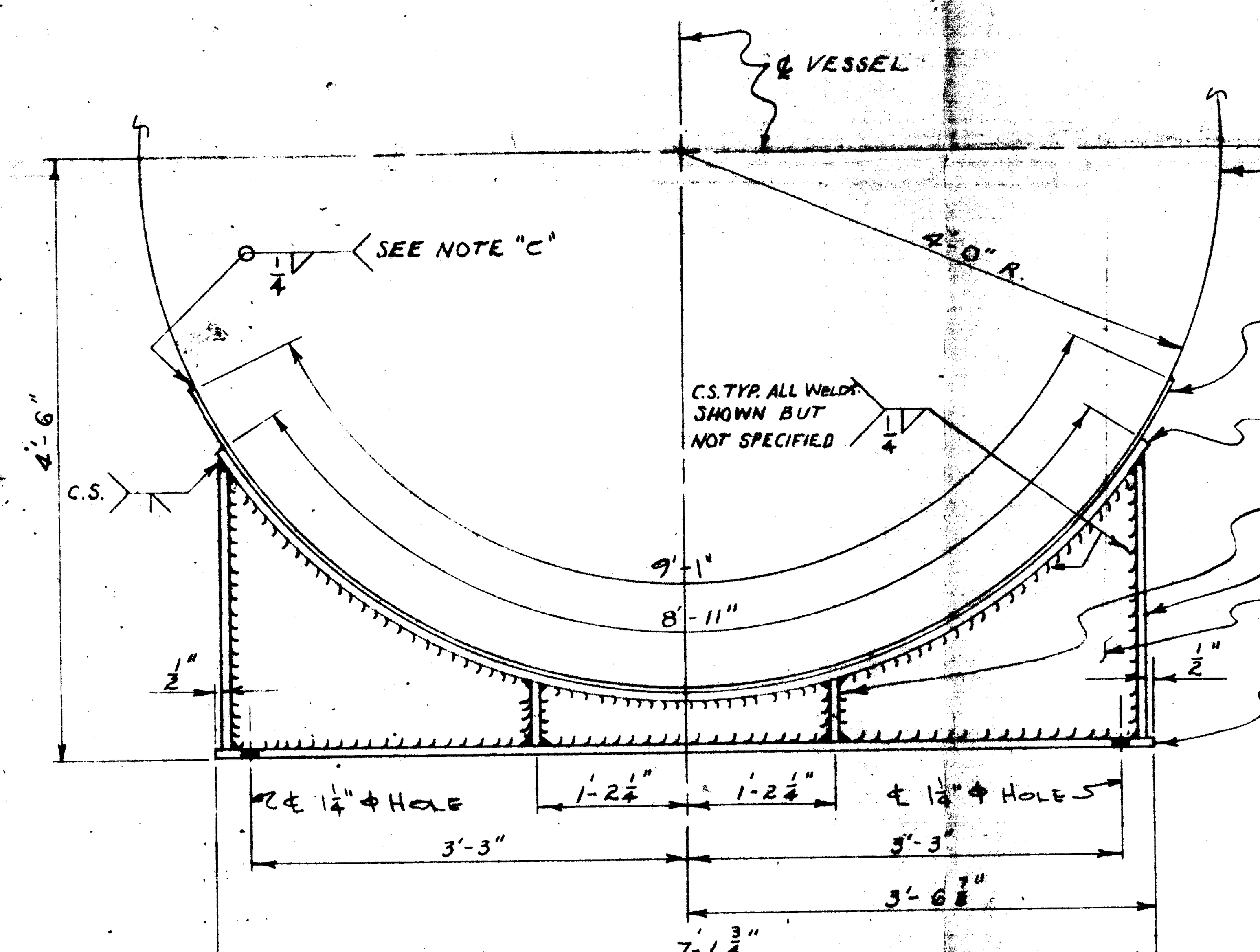
GENERAL NOTES

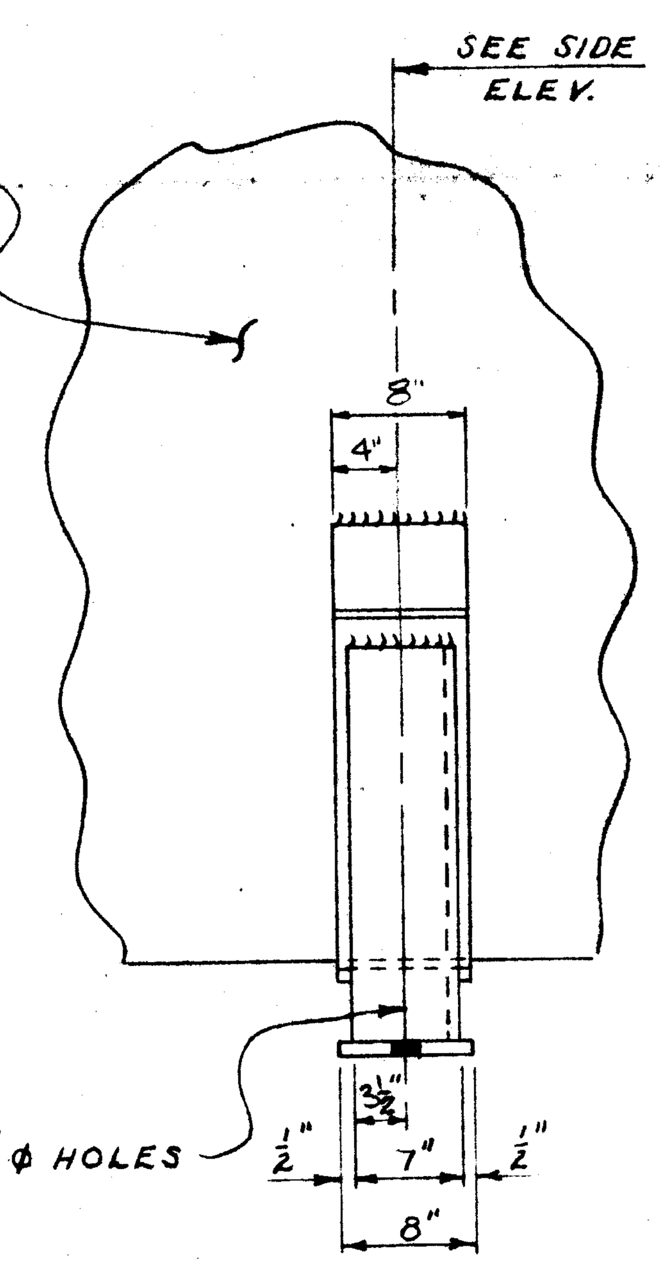
1. All bolt holes shall straddle center lines.
2. Protect all machined surfaces and threaded connections with rust preventive immediately after machining.
3. All nozzle flanges shall be ASA standard except for manhole & NOZZ. "A" FLANGE
4. ** Sandblast all CS surfaces only, before painting.
5. Item No. V-370 P.O. No. 21-829-0
   To be stamped on Name Plate
6. Tolerances per Celanese Spec. Page # 14
7. Name plate to be placed on a CS bracket that extends 2-1/2" from high point of HEAD.

For additional general notes see Dwg. #A-2060 (SHOP FABRICATION NOTES)

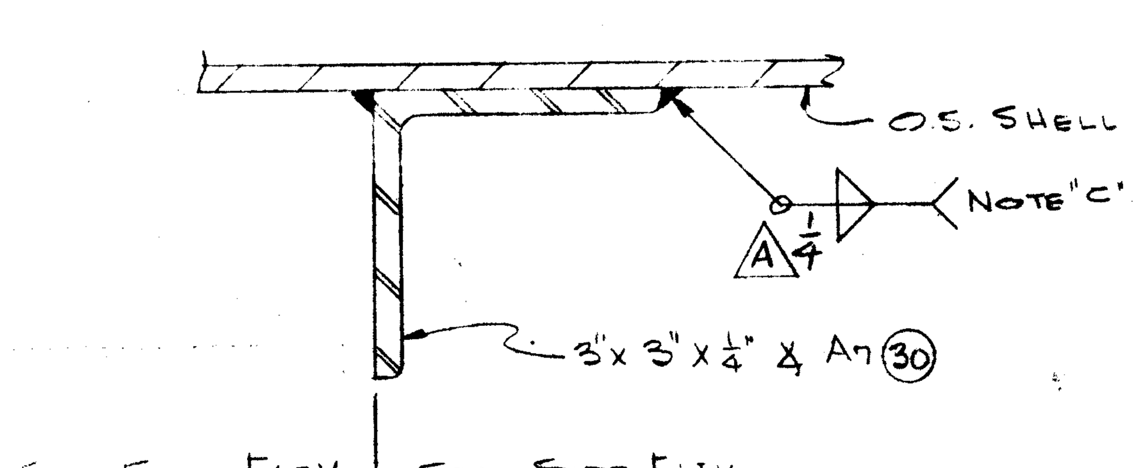


DT'L "C"
(TYP. BOTH HEADS)





DETAIL OF SADDLES
(2 REQ'D.)
(SHIP LOOSE)



DETAIL OF STIFF. RINGS
(8-REQ'D.)

File V-370

\# 95741

WELD ROD NOTES:

(37) NOTE "A" - 1/8" ϕ A-298 CL. E-308-15 OR 16 COATED MANUAL ELECTRODE
(38) NOTE "B" - 3/32" ϕ A-298 CL. E-308 MO-15 OR 16 COATED MANUAL ELECTRODE
(39) NOTE "C" - 1/8" ϕ A-298 CL. E-310 MO-15 OR 16 COATED MANUAL ELECTRODE

REFERENCE DRAWINGS

MISC. DT'LS. #WT-6877 (#E-11663)
NOZZ. DT'LS. #WT-6878 (#E-11664)
GENERAL NOTES (FABRICATION ONLY) #A-2060

QUAN.	DESCRIPTION	WEIGHT	REMARKS
2	SADDLES		
1	8'-0" O.D. X 14'-2 1/2" O.A. LENGTH VESSEL	8,762 #	TOTAL WT.

SHIPPING LIST

W.O. NO.	NO.	DESCRIPTION	BY	CK.	APP'D	DATE
E-2275	1	ADDED NOZZLE "K"	PKW	GHS		3/21/62
	A	REV. ELEVATIONS, DTL. "C" & DT'L. OF STIFF. RINGS PER CUST. APPVL.	CLT	RWX		8-8-60

REVISIONS

SHIPPING WT: 8,762 #
ONE ONLY REQ'D.
S/O D-2495

Celanese CHEMICAL COMPANY
A DIVISION OF CELANESE CORPORATION OF AMERICA
PAMPA ENGINEERING DEPT.

AREA VIII
HIGHER ACRYLATE UNIT
VESSEL
8'-0" O.D. 10'-0" S. TO S.
SIDE & END ELEV.
ITEM # V-370

DR. BY KING DATE 6/24/60
CK. BY KELLY DATE 7-30-60
APP. BY DATE
APP. BY DATE 8/9/60

SCALE
DRAWING NO. WT-6876

PRINT DISTR. 2H

WT. 6876