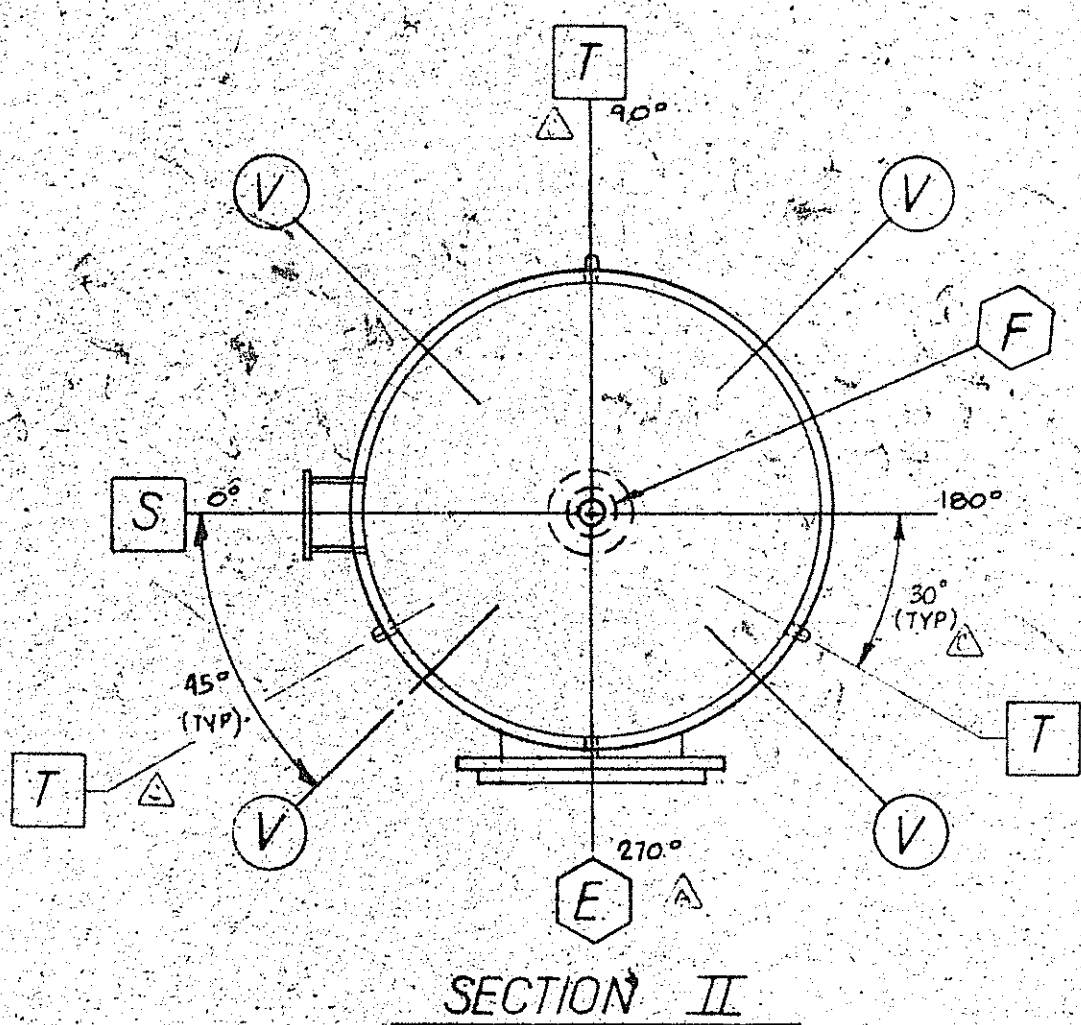
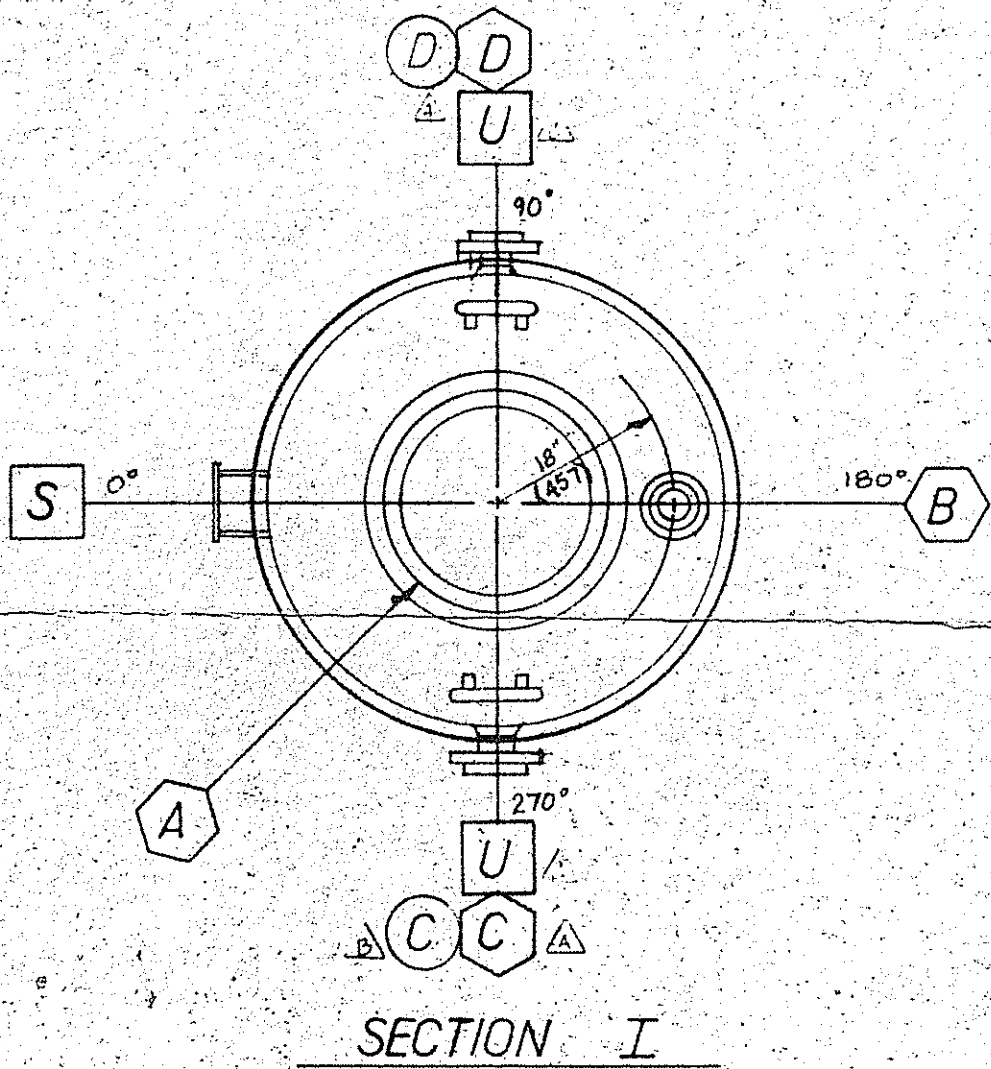
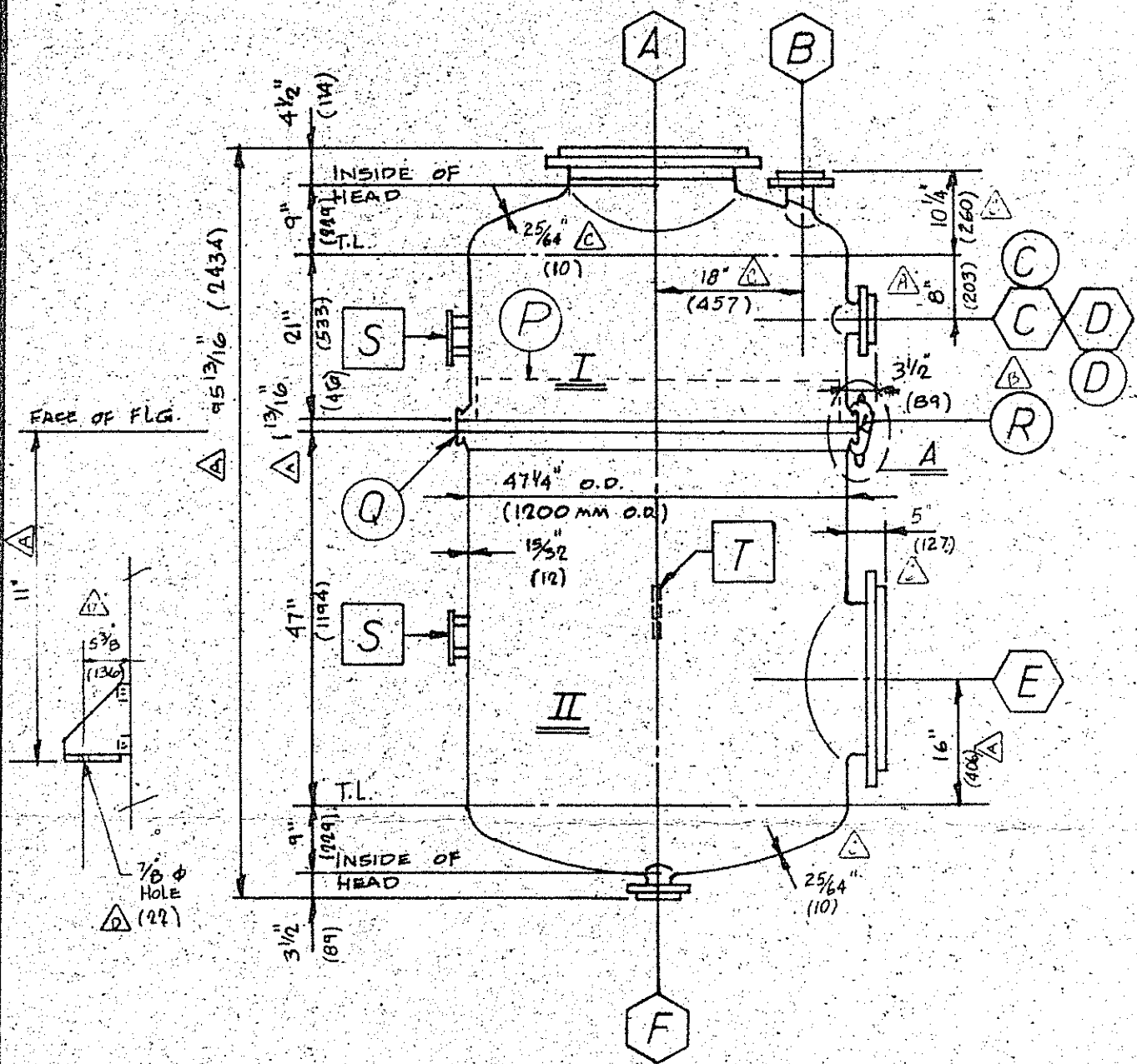
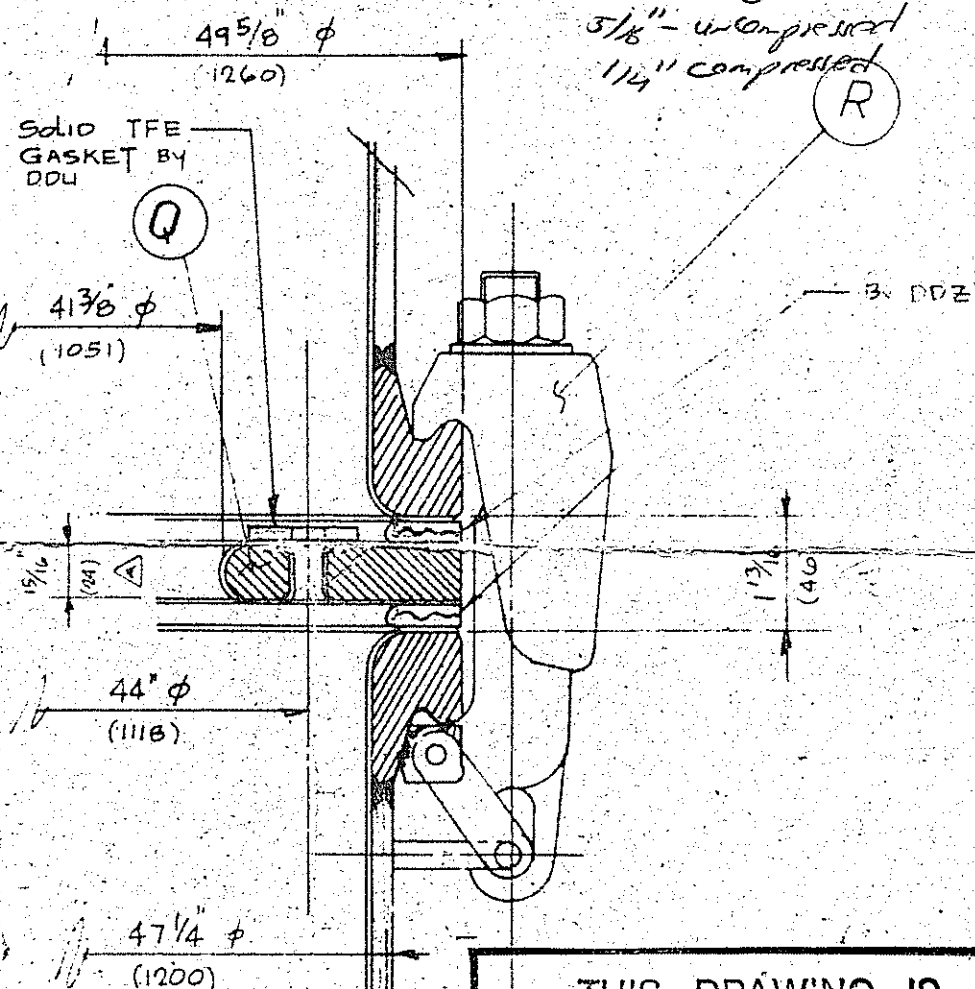




MARK	SIZE	SERVICE	MARK	SIZE	SERVICE
ATTACHMENTS			NOZZLE SCHEDULE		
			A	20"	VAPOR OUTLET
			B	3"	P.I.
			C	4"	SUPPLY W/BLIND FLG + GASKET
			D	3"	DEMISTER W/BL
			E	20"	VAPOR-LIQUID INLET
			F	3"	BOTTOM OUTLET
S	-	(2) NAME PLATE SUPPORT BRACKET			
		ONE EA. SECTION			
T	-	(3) LIFTING LUGS (SECTION II)			
U	-	(2) LIFTING LUGS TOP HEAD (SECTION I)			
ACCESSORIES			GENERAL NOTES		
D	3"	GLASS LINED BLIND FLANGE	1- BOLT CIRCLE & Q.D. OF ALL SPLIT LOOSE FLANGES IN ACCORDANCE WITH ANSI B16.5 SERIES 150 LBS. EXCEPT AS NOTED. 2- ALL DIMENSIONS ARE STEEL TO STEEL, AND ARE NOMINAL DUE TO HIGH TEMP. FIRING. 3- DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ASME CODE, SEC VIII, DIV.1, LATEST ADDENDA. 4- ELECTROSTATIC TESTS 20,000 VOLTS AT FACTORY, 6000 VOLTS IN FIELD. 5- ALL NOZZLES SUPPLIED WITH SPLIT LOOSE FLANGE, EXCEPT WHERE NOTED		
P	-	6" YORK DEMISTER WITH TITANIUM GRIDS & TITANIUM MESH			
Q	-	GLASS LINED SUPPORT DONUT PER DETAIL 'A'			
R	7/8"	(48) L CLAMPS W/RETAINING RING			
V	-	(4) SIDE SUPPORT LUGS SPACED 90° APART P. 315-7A			

Torque Range: 65 FT-Lb - 110 FT-Lb
 10-97 g2 - From Jo Dietrich w/ Add. Gaskets
 5/8" - w/ compressed
 1 1/4" compressed



THIS DRAWING IS
FINAL CERTIFIED
 BY: DATE: 10/17/79
 HOFFMANN-LA ROCHE, INC.

CUSTOMER - HOFFMANN-LA ROCHE, INC.
 PROJECT - 2119
 LOCATION - Bellvidere
 EQUIP. NAME - Column
 P.O. NO. - E-664401B
 POSITION NO. - B8-T607
 EQUIP. CODE NO. - SEP 306

CERTIFIED CORRECT
 De Dietrich (USA), Inc.
 BY: Walter J. Koppa
 DATE: 10/17/79

MATERIALS OF CONSTRUCTION	
VESEL-SHELL & HEADS	SA 285 B
MANHOLE COVER	SA 285B
NOZZLES	SA 181-1
FLANGES	SA 181-1 OR SA 515-60
BACK UP FLANGES	SA 105/515-60
CLAMPS	SA 449
GASKETS	TFE ENVELOPE W/ASBESTOS/ CORRUGATED METAL INSERTS.
GLASS	NO. 3008, BLUE, ACID/ALKALI/ THERMAL SHOCK RESISTANT.
PLUGS	(IF REQUIRED) TANTALUM/ TFE / FURAN RESIN.
PAINT	PRIMER: ZINC-RICH EPOXY BOUND. FINISH: ORANGE, EPOXY ENAMEL.
LIFTING LUGS	SA 285 B
BOLETS (when req'd.)	SA 193-B7
NUTS	SA 325 OR SA 194-2H

SPECIFICATIONS		
DESIGN PRESSURE	50 psig/rev	3.44 bars
TEST PRESSURE	55 psig	3.79 bars
DESIGN TEMPERATURE	500°F	260°C
CORROSION ALLOW.	NONE	
RADIOGRAPH (longitudinal/circumferential)	SPOT & PARTIAL	
HEAT TREATMENT	YES	
ASME STAMP & N.B. REG.	YES	
VOL-TOTAL	592 gal	2239 L
WEIGHT-EMPTY	3000 #	1360 kg
WEIGHT-FLOODED W/H ₂ O	7935 #	3600 kg
WEIGHT-SHIPING	3500 #	1587 kg

REV	DESCRIPTION	ENGR.	DATE	BY
P	ADDED BOLT HOLES IN LUG PER CUST REQUEST	WK	10-9-79	♀
C	REV. PER MFG DWG.	WK	8-7-79	CN
B	ADDED BLIND FLANGE	WK	7-23-79	♀
A	ADDED ORIENTATION OF NOZZLES E, C, ELEVATION OF SUPPORT LUGS, REV. DIMENSION BETWEEN FLG. CONN.	Z	6-11-79	♀

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De Dietrich (USA), Inc.
 U.S. ROUTE 22 • UNION, NEW JERSEY

47 1/4" O.D. COLUMN EQUIP. CODE SEP-306-2

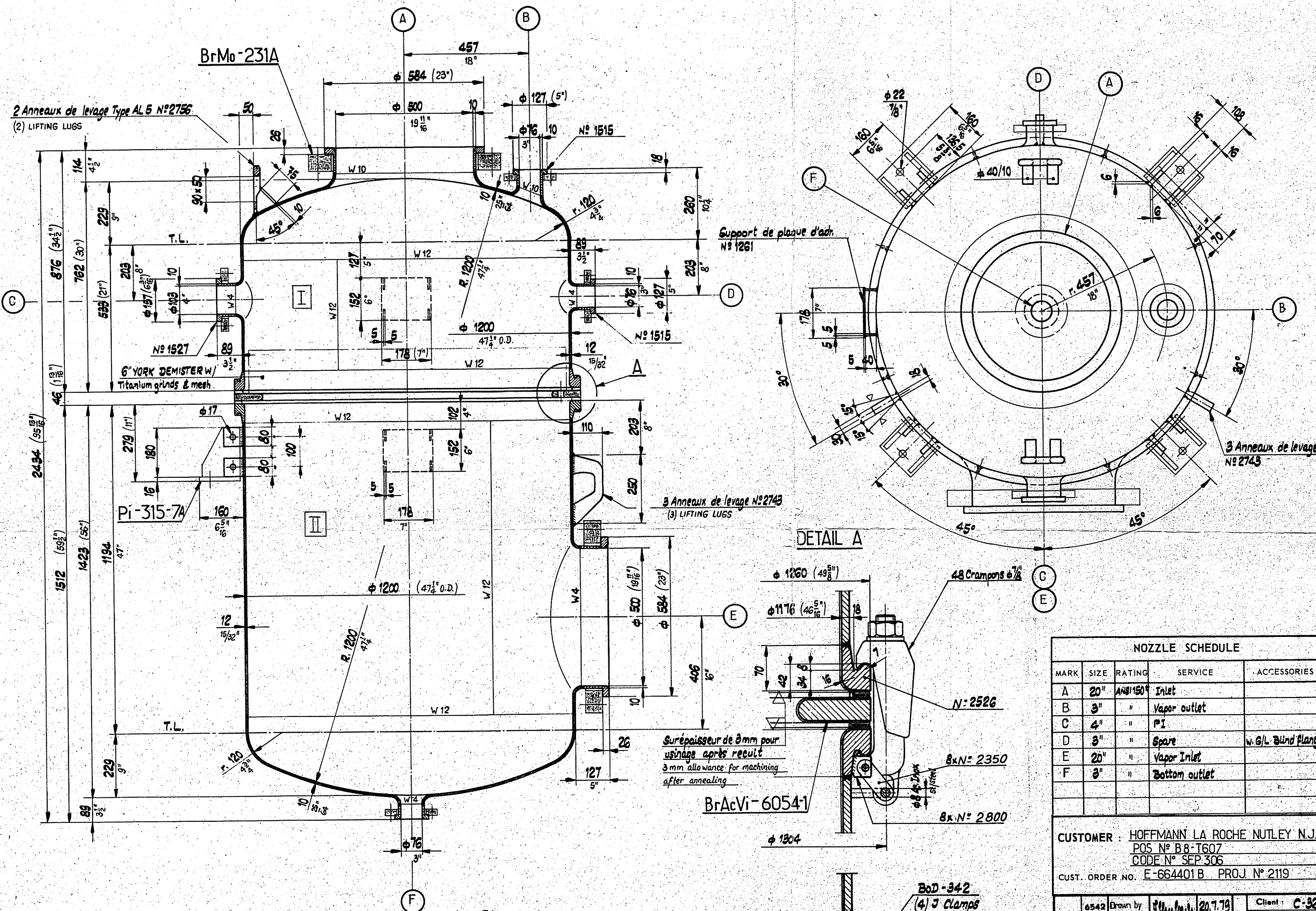
CUSTOMER: Hoffmann La Roche
 P.O.# E-664401B Nutley, NJ

SS. NO. BE-7607
 CODE NO. SEP-306 A

CUST. REF. DWG. / SPEC. NO. QUANTITY ONE (1)

DWG. BY	♀	10-9-79	DDZ. SO#	421 381	TAG NO.(S)
APPROVED	TC	10-27-78	DDZ. DWG.	CL-1200-001	DWG. NO. C-3236
RELEASED	TC	6-21-79	SCALE	NONE	

EQUIP. CODE NO. SEP-306



CERTIFIED CORRECT

De Dietrich (USA), Inc.
BY: *Walter J. Kopido*
DATE: MAY 1 1980

INFORMATION DRAWING
☒ FINAL 5/2/80
☐ PRELIMINARY

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DDU P.O.	Cde (Etu)	Date	Nbre	MFR'S N°
2820 SW	421381	6.10.78	1	31671

GENERAL NOTES

- 1 - VESSEL DESIGNED AND FABRICATED IN ACCORDANCE WITH ASME CODE - SECTION VIII - DIVISION 1, CURRENT EDITION AND LATEST EFFECTIVE ADDENDA.
- 2 - BOLT CIRCLES AND O.D. OF ALL BACK UP FLANGES IN ACCORDANCE WITH ANSI B 16.5 - SERIES 150 LB.
- 3 - ALL COUPLINGS 3000 LB. NPT
- 4 - ALL DIMENSIONS ARE STEEL TO STEEL, AND ARE NOMINAL DUE TO HIGH TEMPERATURE FIRING
- 5 - FOR WELDING DETAILS AND GROOVE PREPARATION, SEE "WELDING PROCEDURE SPECIFICATIONS"
- 6 - GLASS LINING NO. 3008
- 7 - GLASS ELECTROSTATIC TEST : 20000 VOLTS AT FACTOR 6000 VOLTS IN FIELD
- 8 - PLUGS : (IF REQUIRED) TANTALUM/TFE/FURAN-RESIN
- 9 - PAINT : Primer: Zinc rich epoxy primer
Finish: Orange epoxy enamel

MATERIALS OF CONSTRUCTION

- VESSEL - SHELL AND HEADS	SA - 285 B
- BLIND FLANGE	SA - 285 B
- NOZZLES	SA - 181-1
- FLANGES	SA - 515-60 OR SA - 181-1
- BACK UP FLANGES	3" $\phi 4$ SA - 105 20" SA - 515-60
- CLAMPS	SA - 449
- GASKETS	TEFLON ENVELOPE ASBESTOS, CORRUGATED METAL INSERT

SPECIFICATIONS

DESIGN	VESSEL	JACKET
TOTAL CAPACITY	591 US.GAL. 2237 LITERS	US.GAL. LITERS
DESIGN PRESSURE	50 PSIG AND F.V.	PSIG OR PSIG W. INT. F.
DESIGN TEMPERATURE	500 ° F 260 ° C	° F ° C
TEST PRESSURE	55 PSIG 3.79 BARS	PSIG BARS
CORROSION ALLOW.	NONE	
RADIOGRAPH	PARTIAL + SPOT	
HEAT TREATMENT	YES	NO
ASME CODE STAMPED & NAT'L B.D. REGISTERED	YES	YES

WEIGHTS

Empty	~ 3000 LB
	LB
	LB

NOZZLE SCHEDULE				
MARK	SIZE	RATING	SERVICE	ACCESSORIES
A	20"	ANSI 150	Inlet	
B	3"	"	Vapor outlet	
C	4"	"	P.I.	
D	3"	"	Spare	w/ G/L Blind flange
E	20"	"	Vapor Inlet	
F	3"	"	Bottom outlet	

CUSTOMER: HOFFMANN LA ROCHE NUTLEY N.J.
 POS N° B-8-T607
 CODE N° SEP-306
 CUST. ORDER NO. E-664401B PROJ. N° 2119

6542	Drawn by	<i>W. J. Kopido</i>	20.7.79	Client: C-3233A
6544	Design Engineer	<i>W. J. Kopido</i>	25.7.79	Archives:
6547	Engineering Manager	<i>W. J. Kopido</i>	27.7.79	Projel:
6545	Ech.: 0,1			Extr. Orig.:
6548				Remplace:
6520				Rempl. par:

De Dietrich
 USINE DE ZINSWILLER

DIVISION
 EQUIPEMENT
 CHIMIQUE

PLAN N° CI-1200-001A
 EQUIP. CODE NO. SEP-306
 Devis (Code) N°

SEE CHANGES MADE
 FOR PROJECT GBC00016 SEP-306-1