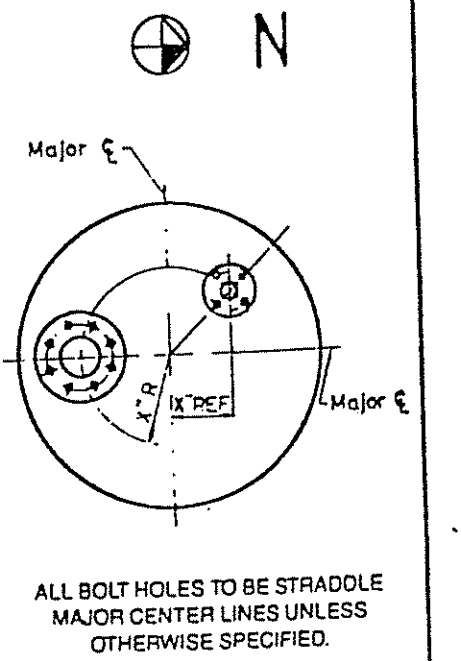


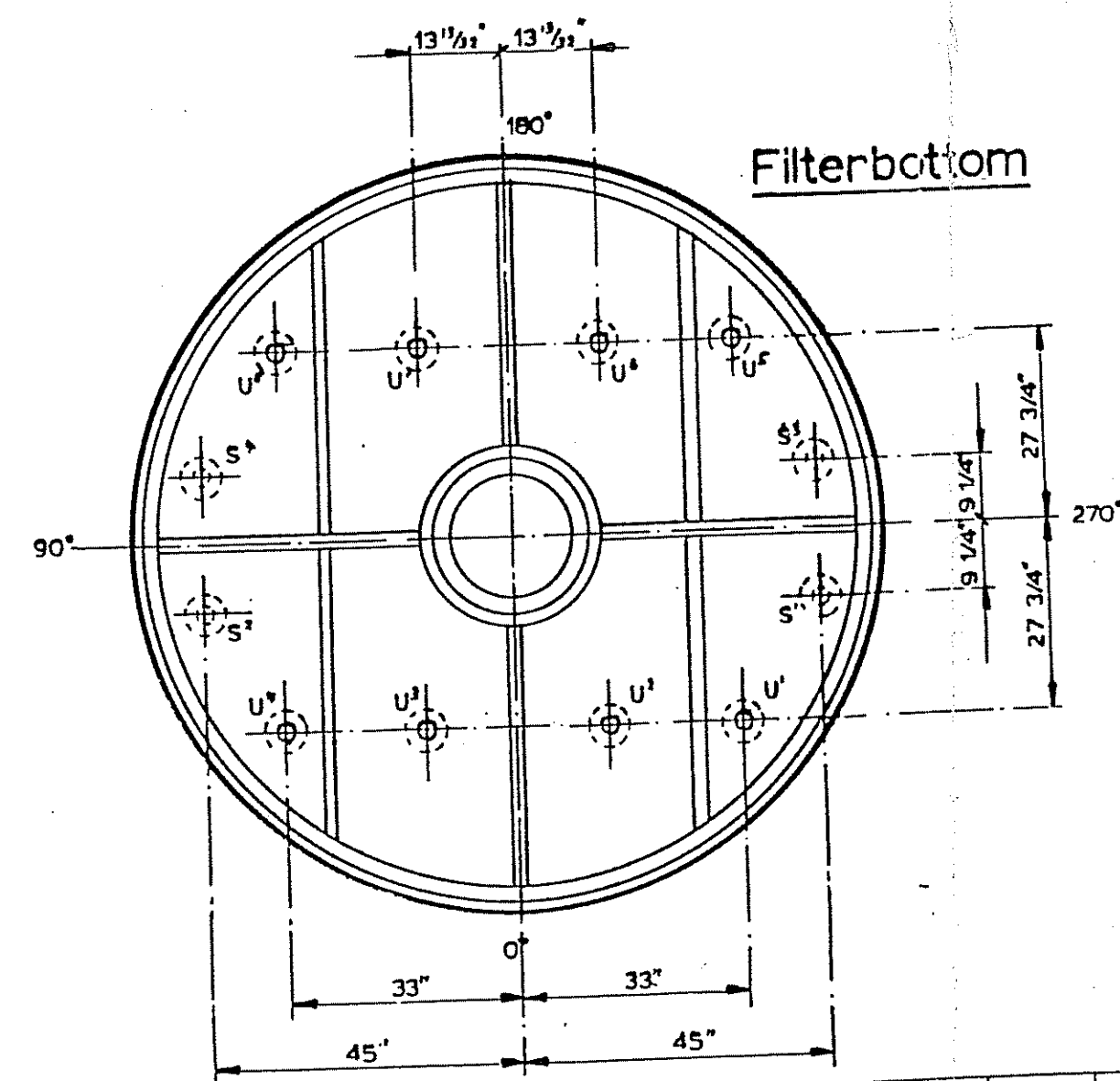
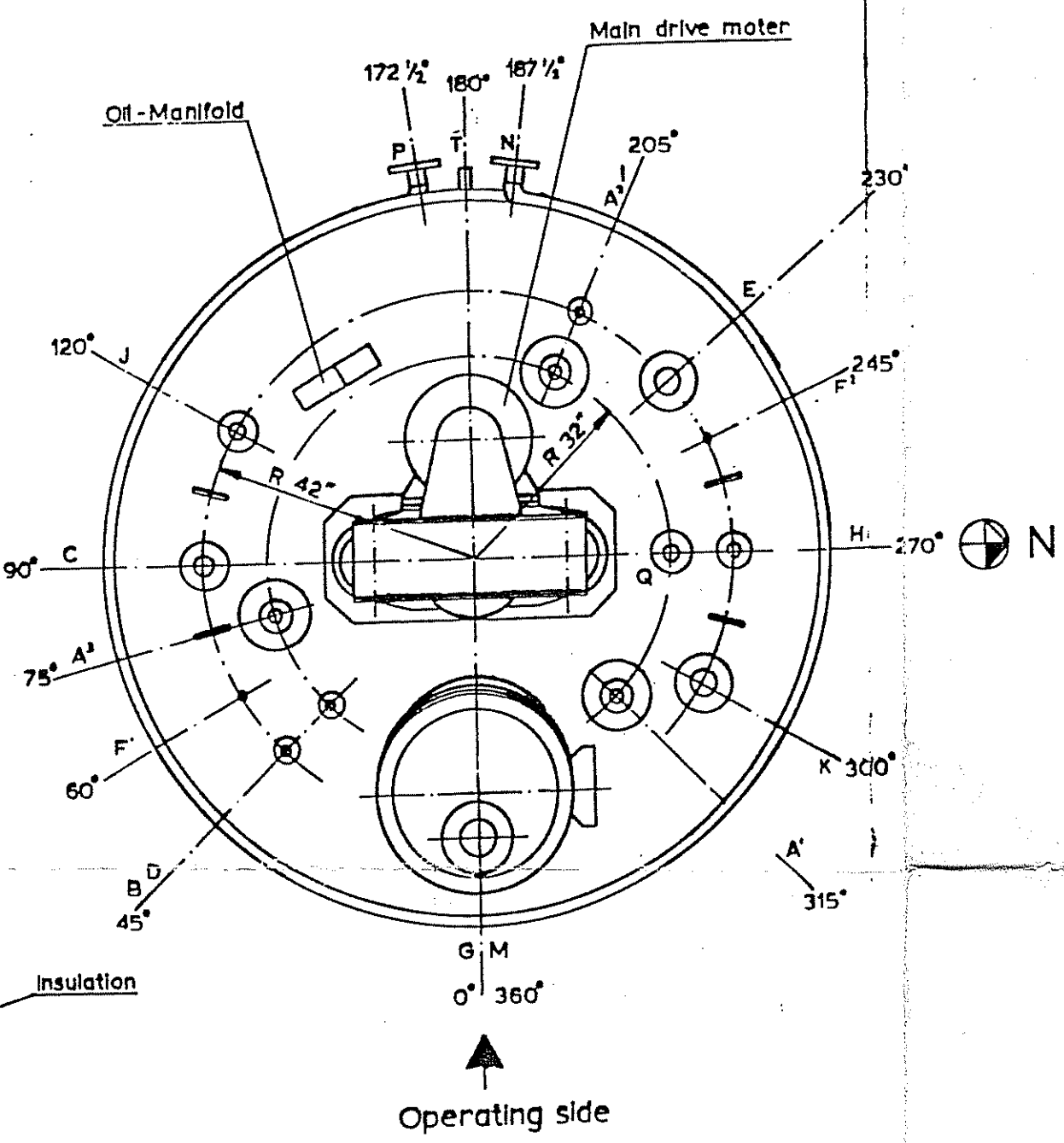
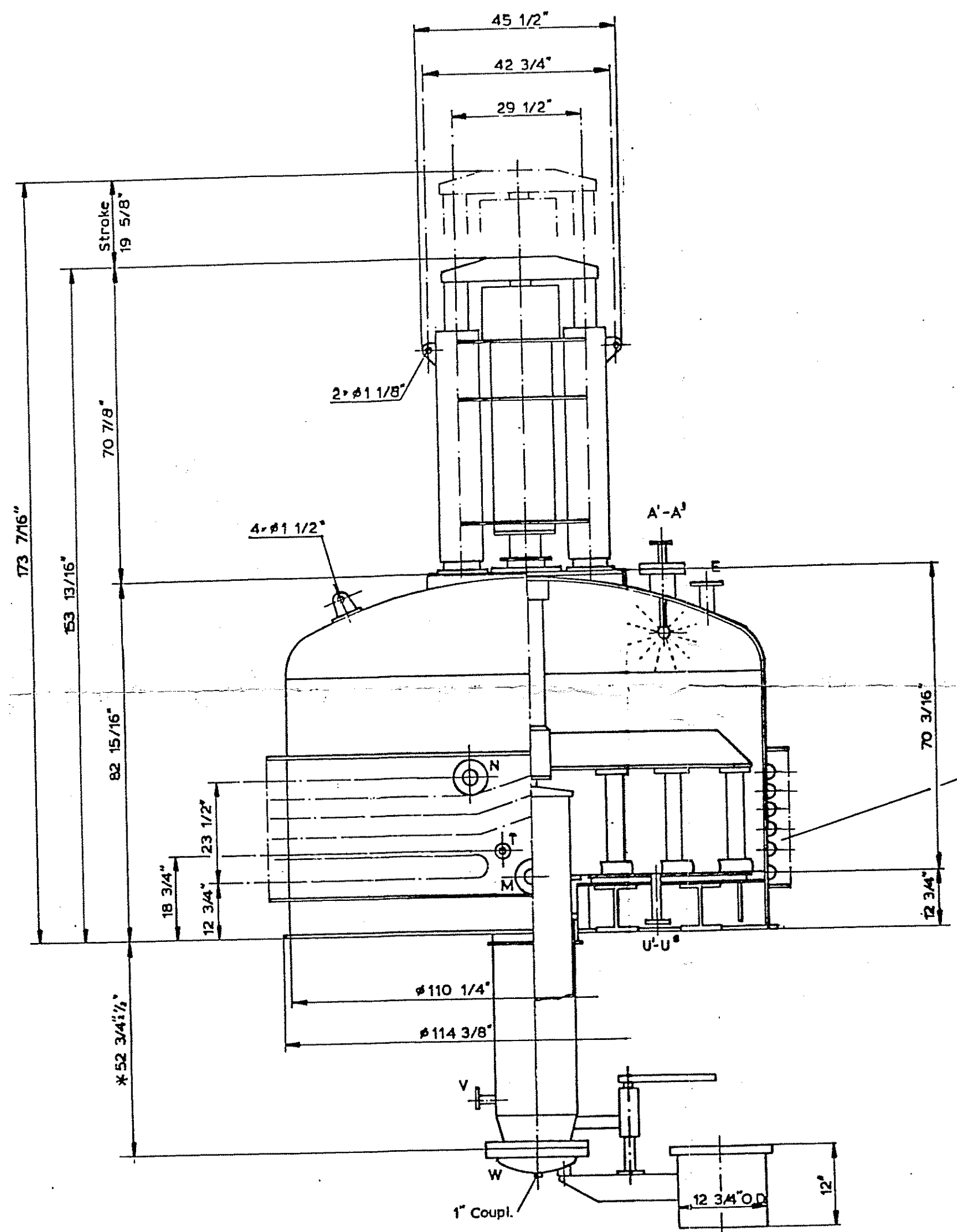
TOP VIEW IS STANDARD FOR NOZZLE ORIENTATION

NOZZLE ORIENTATION

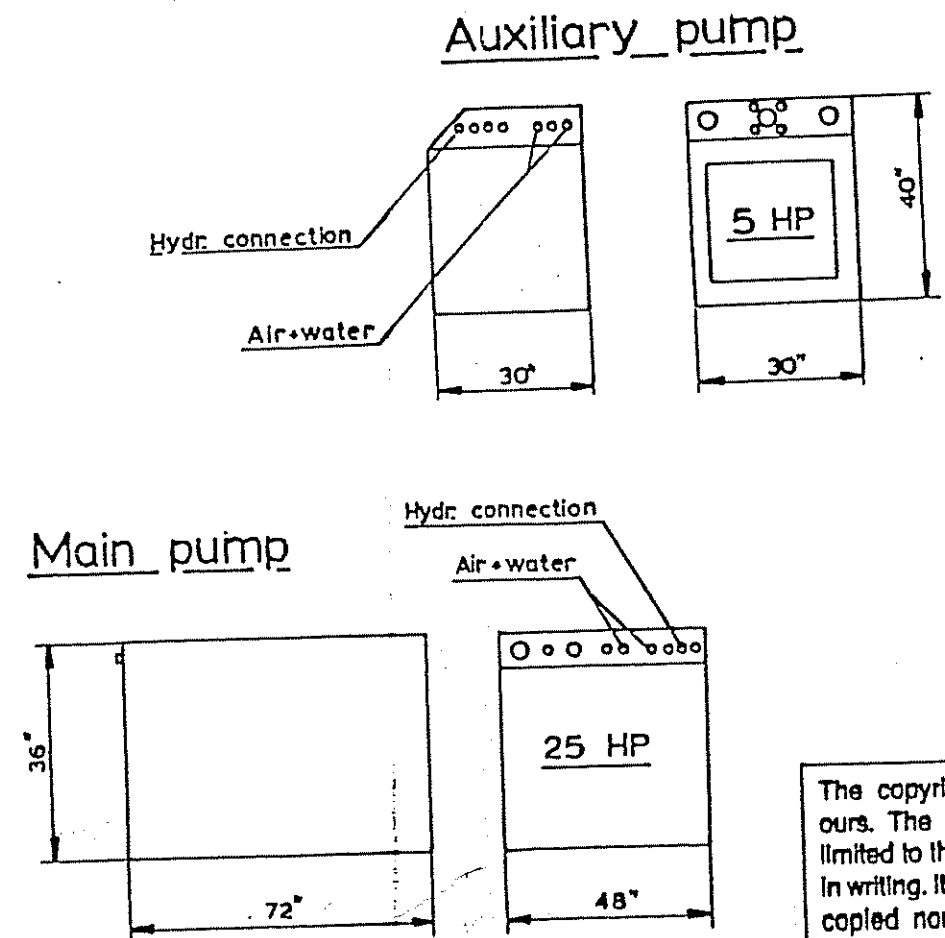
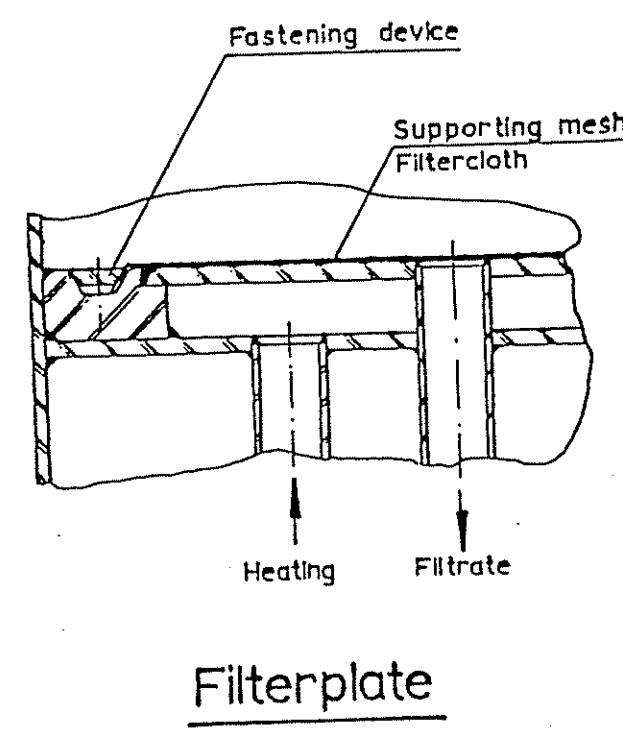
NOZZLE	DESCRIPTION	SIZE	RATING
A'-A'	Sprayball	671 1/2"	150 #
B	Pressure gas	1"	150 #
C	Product inlet	3"	150 #
D	Pressure gauge	1"	150 #
E	Safety valve	4"	150 #
F', F''	Light	1"	3000 #
G	Sight glass	6"	Pad.
H	Vent	2"	150 #
I	Balance line	1"	150 #
J	Spare	2"	150 #
K	Vacuum	6"	150 #
L	Agitator	18"	RoAG
M	Manway	26"	50 #
N	Jacket heating in	3"	150 #
O			
P	Jacket heating out	3"	150 #
Q	Sample	2"	150 #
S'-S'	Base heating in/out	1 1/2"	150 #
T	Thermowell	1/2"	Pad
U'-U'	Filtrate outlet	1 1/2"	150 #
V	Balance line	1"	150 #
W	Discharge	12"	150 #



ALL BOLT HOLES TO BE STRADDLE MAJOR CENTER LINES UNLESS OTHERWISE SPECIFIED.



Important
*Flexible connection due to stuffing box gland



PROCESS DATA	VESSEL	JACKET	BASE
Maximum Capacity	FT		
Operating Pressure	Psig		
Operating Temperature	°F		
DESIGN SPECIFICATION			
Maximum Pressure	Psig	50/FV	150
Maximum Temperature	°F	-20/+370	-20/+370
Corrosion Allowance	Inch	None	None
Code + stamp		ASME	ASME
X-Ray		By code	
Hydraulic Test Pressure	Psig	75	225
Flanges		ANSI	ANSI

MATERIAL OF CONSTRUCTION			
Vessel SA 240	316 L	Base	304 L / 316 L / Carbon steel
Jacket SA 312	304 L	Gasket	Teflon
Boiling Cad. plated		Agitator	316 L SS

ELECTRICAL SPECIFICATION				
Main Drive Motor (Hydr.)	25 HP	1800 RPM	460 V	60 Hz
Classification	Cl. 1	Div. 1	Group C+D	Explosion proof
Auger Drive Motor	HP	RPM	V	Hz
Classification				
Hydraulic Pack Motor	5 HP	1800 RPM	460 V	60 Hz
Classification	Cl. 1	Div. 1	Group C+D	Explosion proof
Controls	AC 110 V, Classification NEMA 4			
Weight of Filter, Full	53'000 LBS, Weight, Empty			30'000 LBS

Rosenmund Inc. Job # _____ Filter # _____
Client Sandoz Crop Protection Corp. Tag #: SC-170

ROSENMUND INC. 2969 INTERSTATE STREET • P. O. BOX 668625
CHEMICAL PROCESS EQUIPMENT CHARLOTTE, NC 28266-8625

For 6 m² Paddle filter
Scale Drawn 5/16/90
Checked
Dimensional drawing DWG. No. 90-RF-147 B

The copyright for this drawing remains ours. The use of this drawing is strictly limited to the purposes we have agreed to in writing. It may neither be reproduced nor copied nor brought to any third party's notice without our written consent.

No.	REVISION	Date	Apprv.
B	Misc. customer changes	6/18/90	fu
A	Added nozzle Q + changed to 5HP Mot.	6/4/90	fu

#111003

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

as required by the provisions of the ASME Code rules, Section VIII, Division 1

6M² (110" JKT. FILTER)

1. Manufactured and certified by GASTON COUNTY DYEING MACHINE CO. - HWY 27 WEST - MT. HOLLY, NC 28120

(name and address of manufacturer)

2. Manufactured for ROSENMUND, INC. - P.O. BOX 668625 - CHARLOTTE, NC 28266-8625

(name and address of purchaser)

3. Location of installation UNKNOWN

(name and address)

4. Type: VERT. JKT. TANK F80744-590-1 A3600439 (C) 21793 1990

(horiz. or vert. tank) (mfr's. serial no.) (CRK) (drawing no.) (Mat'l. Id. no.) (year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction and workmanship conform to ASME Code, Section VIII, Division 1: 1989

(year)

N/A

(addenda ref.)

(Code Case no.)

(special service per UG-120(d))

Items 6-11 inclusive to be completed for ~~horizontal and vertical tanks~~ jackets of jacketed vessels, ~~horizontal and vertical tanks~~ HALF PIPE COIL ON SHELL

6. Shell: SA240-304 .130" 0 3.240 6 TURNS

(mat'l. spec. no., grade) (nom. thickness (in.)) (corr. allow (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

7. Seams: WLD SGL BUTT

(long. (dbl., angl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (grth (dbl., angl.)) (RT (spot, partial, or full)) (no. of courses)

8. Heads: (a) SA240-304 (b) SA240-304

(mat'l. spec. no., grade) (mat'l. spec. no., grade)

	Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)										
(b)										

If removable, bolts used (describe other fastenings):

(mat'l. spec. no., gr., size, no)

9. Type of jacket: HALF PIPE COIL Proof test: _____

10. Jacket closure: FLANGED ENDS If bar, give dimensions: _____ If bolted, describe or sketch.

(describe as open & weld, bar, etc.)

11. MAWP: 150 psi at max. temp. 370 °F. Min. design metal temp. -20 °F at 150 psi. Hydro., ~~XXXXXX~~ test press. 240 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: SA240-304 3/8" 0 9' 1 1/2" 4' 2 7/8"

(stationary mat'l. (spec. no., gr.)) (dia. (in.) (subject to pressure)) (nom. thickness (in.)) (corr. allow (in.)) (attachments (welded, bolted))

(floating mat'l. (spec. no., gr.)) (dia. (in.)) (nom. thickness (in.)) (corr. allow (in.)) (attachments)

13. Tubes: SA240-304 3/8" 0 9' 1 1/2" 4' 2 7/8"

(mat'l. spec. no., gr.) (OD (in.)) (nom. thickness (in. or gauge)) (no.) (type (straight or U))

Items 14-17 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: SA240-316L 3/8" 0 9' 1 1/2" 4' 2 7/8"

(mat'l. spec. no., gr.) (nom. thickness (in.)) (corr. allow (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

15. Seams: WLD DBL BUTT NONE 70% N/A WLD DBL BUTT NONE 1

(long. (dbl., angl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (grth (dbl., angl.)) (RT (spot, partial, or full)) (no. of courses)

16. Heads: (a) SA240-316L (b) SA240-316

(mat'l. spec. no., grade) (mat'l. spec. no., grade)

	Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	TOP	.46875	0	110.25"	6.62					BOTH
(b)	BOTTOM	.375	0					19' 1 1/2"		O.D.

If removable, bolts used (describe other fastenings):

(mat'l. spec. no., gr., size, no)

17. MAWP: 50 / FULL VACUUM psi at max. temp. 370 °F. Min. design metal temp. -20 °F at 50/0 psi. Hydro., ~~XXXXXX~~ test press. 75 psi.

FORM U-1 (back)

18. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'l	Nom. Thickness	Reinforcement Material	How Attached	Location
OUTLET	1	20 3/16"	PAD	SA508 CL1	1.312		WELDED	HEAD
MANWAY	1	25 1/2"	FLANGED	SA240-316L	.500		WELDED	HEAD
AGITATOR MOUNT	1	13 3/16"	PKG GLAND	SA240-316L	1.0		WELDED	HEAD
INLET	4	6"	FLANGED	SA312-316L	.216		WELDED	HEAD
SAFETY VALVE	1	4"	FLANGED	SA312-316L	.237		WELDED	HEAD
THERMOWELL	1	3 1/2"	BOLT PAD	SA479-316L	1.105		WELDED	SHELL
IN. OUTLET	2	3"	FLANGED	SA312-304	.120		WELDED	JACKET
INLET	1	3"	FLANGED	SA312-316L	.216		WELDED	HEAD
OUTLET	3	2"	FLANGED	SA312-316L	.154		WELDED	HEAD
OUTLET	12	1 1/2"	FLANGED	SA312-316L	.145		WELDED	HEAD
INLET	2	1"	COUPLING	SA182-316L	3000#		WELDED	HEAD
IN. OUTLET	3	1"	FLANGED	SA312-316L	.133		WELDED	HEAD

19. Supports: Skin NO Lugs NO Legs NO Other FLAT BOTTOM BEAMS Attached WELDED TO BOTTOM & SHELL
(yes or no) (no.) (no.) (describe) (where and how)

20. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: _____
(name of part, item number, mfr's name and identifying stamp)

IMPACT TESTING NOT REQUIRED PER PAR. UCS-66(a), UG-20(f) & UHA-51. UNF-65.

*SPOT X-RAYED MULTIPIECE BOTTOM HEAD.

THE FOLLOWING IDENTIFICATION IS SCRIBED WITHIN 8" OF THE CODE NAMEPLATE: NB 21793 G.C.

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. 11254 expires 1-31, 19 93
 Date 1-15-91 Name GASTON COUNTY DYEING MACH. CO. Signed [Signature]
(manufacturer) (representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by GASTON COUNTY DYEING MACHINE CO. at MT. HOLLY, NC
 I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of NORTH CAROLINA and employed by LUMBERMENS MUTUAL CASUALTY CO.

of ILLINOIS have inspected the pressure vessel described in this Manufacturers' Data Report on 12-20, 19 90 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 the Manufacturers' 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 1-18-91 Signed [Signature] Commissions NB 10523 B NC 1187
(Authorized Inspector) (Nat'l Bd. incl. endorsements) state, prov. and no.

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME BOILER AND PRESSURE VESSEL CODE

"U" Certificate of Authorization no. _____ expires _____, 19 _____
 Date _____ Name _____ Signed _____
(assembler that certified and constructed field assembly) (by 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 Manufacturers' 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 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 the Manufacturers' 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 _____
(Authorized Inspector) (Nat'l Bd. incl. endorsements) state, prov. and no.

FORM U-4 MANUFACTURERS' DATA REPORT SUPPLEMENTARY SHEET

as required by the provisions of the ASME Code rules, Section VIII, Division 1

6M² (110" JKT. FILTER)

- 1. Manufactured and certified by GASTON COUNTY DYEING MACHINE CO. - HWY 27 WEST - MT. HOLLY, NC 28120
(name and address of manufacturer)
- 2. Manufactured for ROSENMUND, INC. - P.O. BOX 668625 - CHARLOTTE, NC 28266-8625
(name and address of purchaser)
- 3. Location of installation UNKNOWN
(name and address)
- 4. Type: VERT. JKT. TANK F80744-590-1 A3600439 (C) 21793 1990
(horiz., vert., tank, etc.) (mfr's. serial no) (CRN) (drawing no) (Nat'l Bd no) (year built)

Data Report Item Number	Remarks
20. REMARKS	THE FLAT BOTTOM IS STRUCTURALLY SUPPORTED BY:
	(4) SA36, 10" WF 88 LB/FT. BEAMS AND
	(1) FABRICATED BEAM SA516 GR.70 NORM. 3/4" & 1" THK. X 10 7/8" HIGH X 10 1/4" WIDE.
	(2) BRACES SA516 GR.70 NORM. 1/2" THICK X 10" HIGH.
	INTERNAL FILTER BED JACKET: WP 150 PSI @ -20°F TO 370°F, HYDRO TESTED AT 240 PSI (NOT INCLUDED IN CODE STAMPING AND CERTIFICATION).

Date 1-15-91 Name GASTON COUNTY DYEING MACHINE CO. Signed *T. A. Duncan*
(manufacturer) (representative)

Date 1-12-91 Signed *R. W. Dobbin* Commissions NB 10523 B NC 1187
(Authorized Inspector) (Nat'l Bd. incl. endorsements) state, prov. and no.