

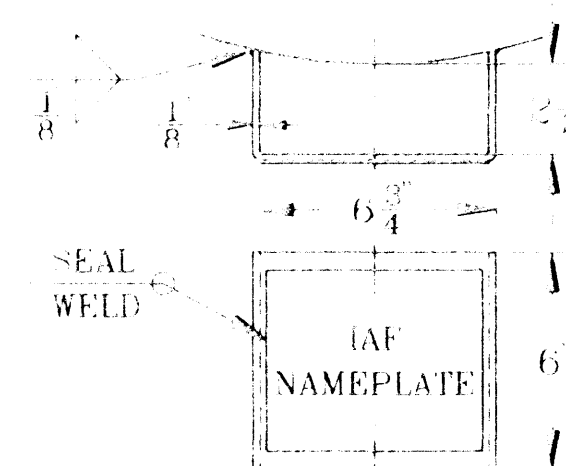
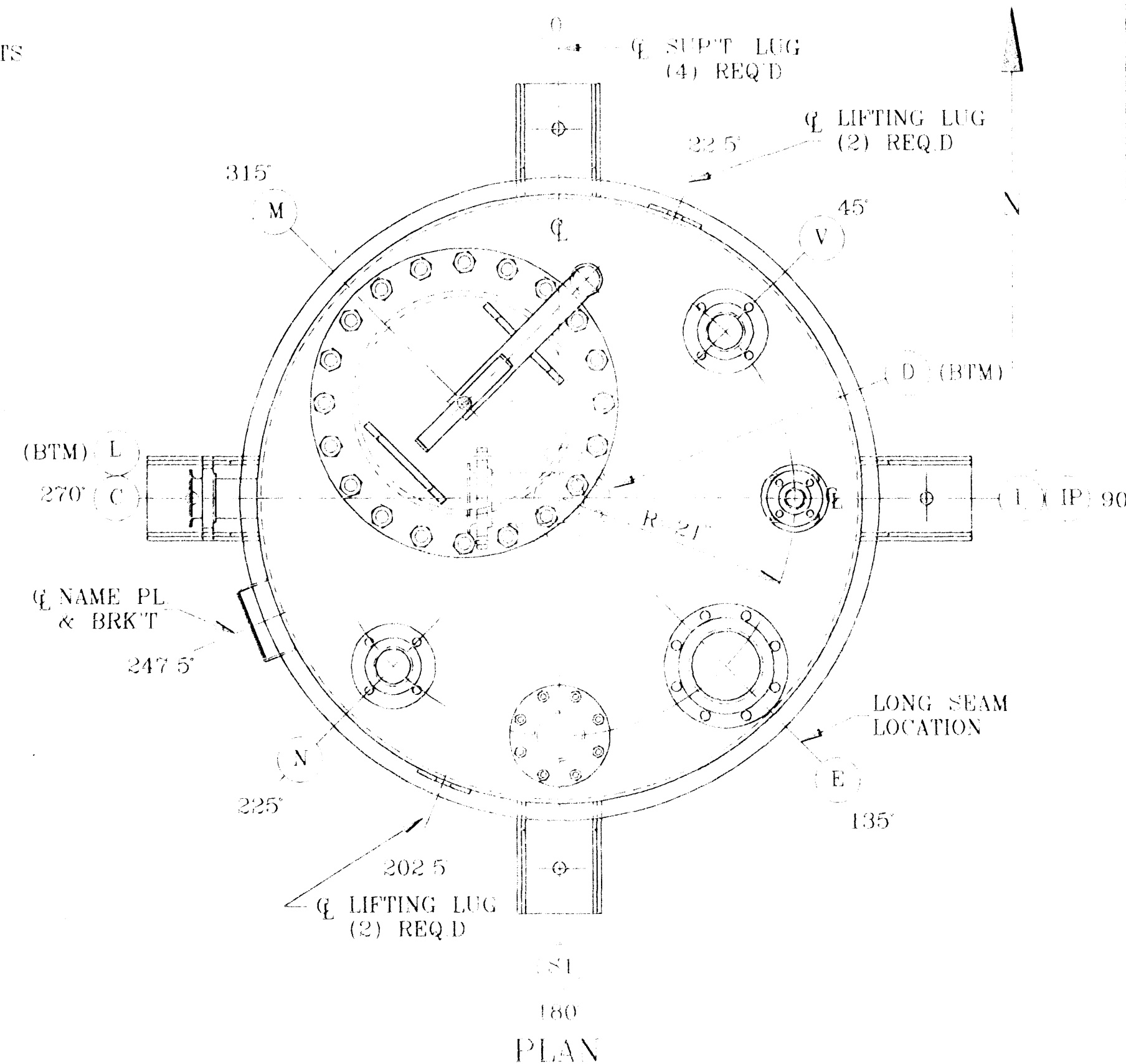
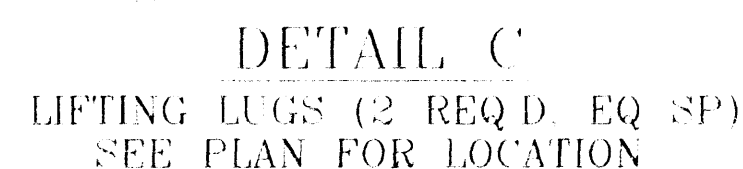
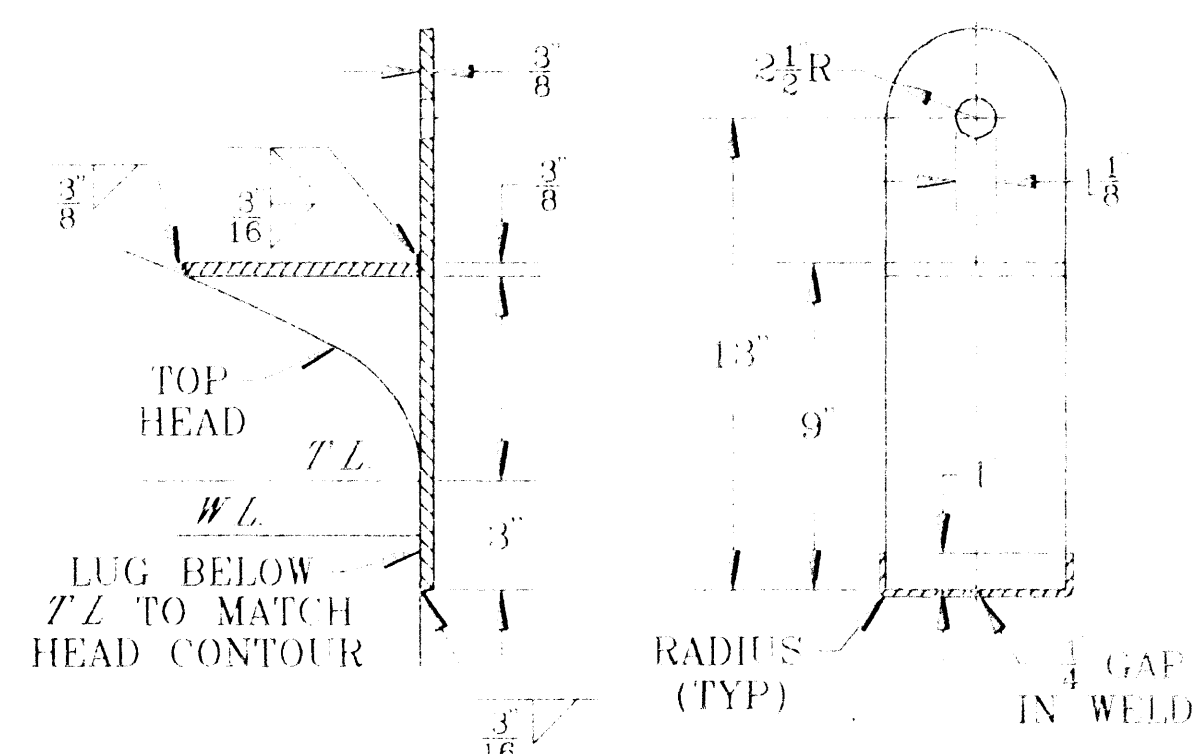
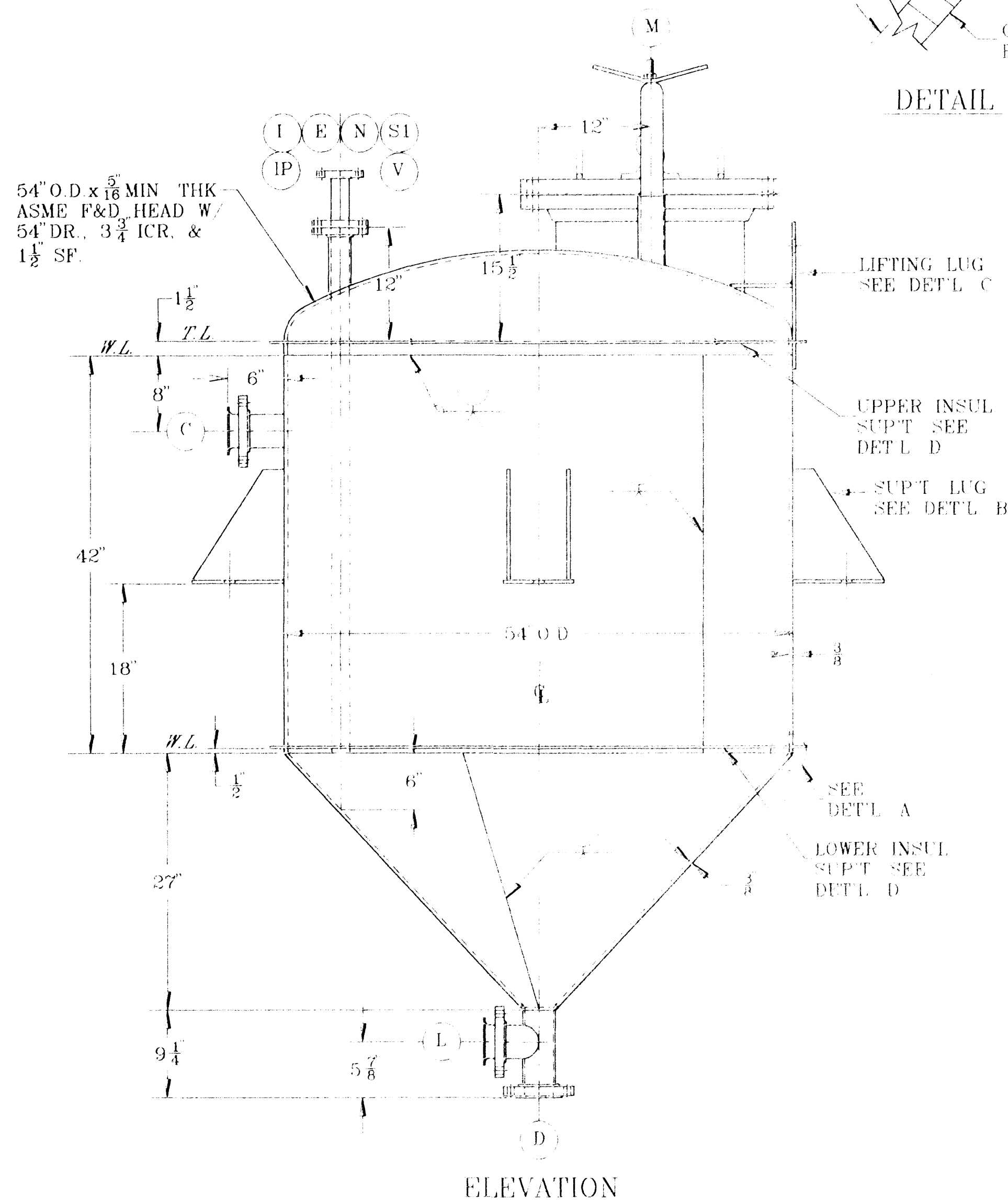
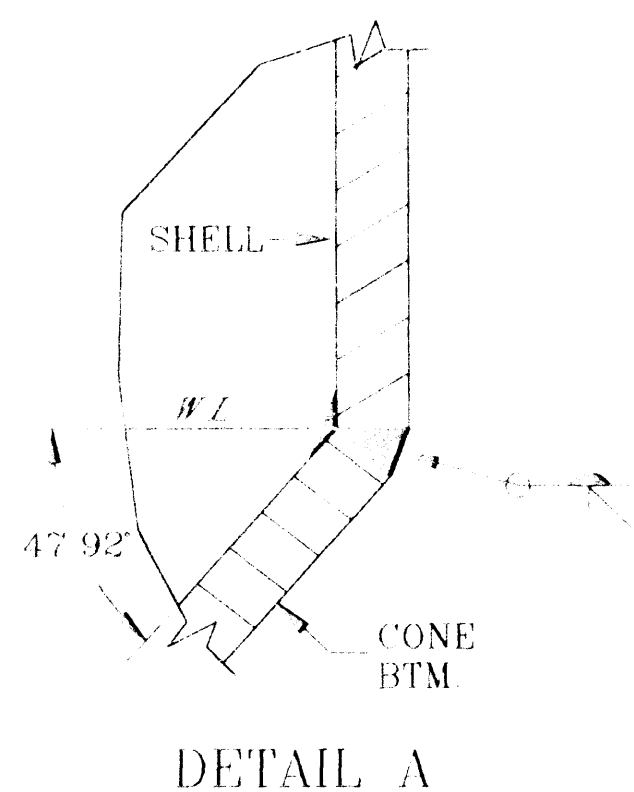
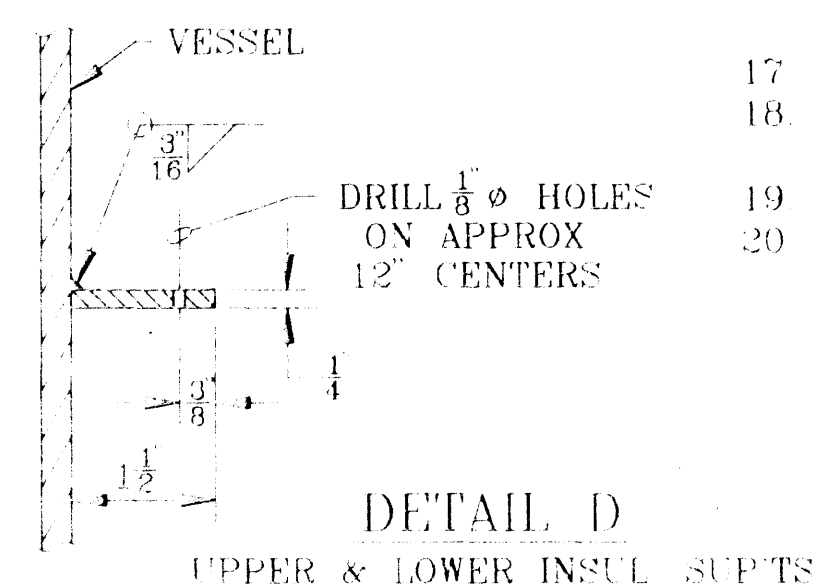
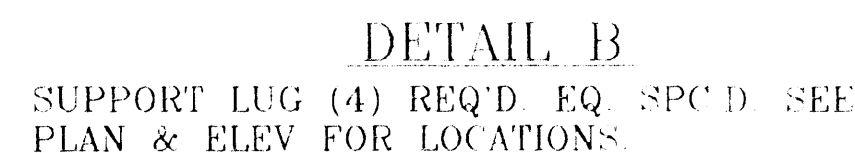
Rev	Date	Reviewed by:	Approved by: Engineering Manager
0	2/24/98	J. Angelo	

EQUIPMENT - DATA SHEET

93412

Equipment : V-6601 (MCT/Water Split Tank)
Manufacturer : Industrial Alloy
Year Fabricated : 1994
Natl. Board No. : N/A
Serial No. : F-958-2
Classification : Class 2
PSM Covered : Yes
P&ID's : 6-F-6
TML Dwg No. : PSM-V6601
Contents :
 Acetonitrile (<0.5%) Methanol (9.3%)
 MCT (25.1%) Methyl Acetate (7.6%)
 Methyl Chloride (<0.1%) TMOA (2.0%)
 Acetimidate Complex (7.4%) Sodium Chloride (<0.5%)
 Methyl Triazine (<0.5%) Ammonium Chloride (<0.5%)
 Water (42.3%) Sodium Hydroxide (4.7%)

Item	Vessel
Design Conditions	
Internal Pressure (psig)	2.5
External Pressure (psig)	0.1444
Design Temperature (°F)	212
MDMT (°F)	-20
Hydrotesting (psig)	7
Head Type (top/bottom)	ASME F&D/Cone
Material of construction	SB688-AL6XN
Diameter	54" (OD)
Length	42" (S to S)
Corrosion Allowance	0.125"
Heat treatment	None
Min. Wall Thickness (shell/head)	0.1525"/0.1401" top/0.1463" cone
Nom. Wall Thickness (shell/head)	0.3125"/0.3125" top/0.375" cone
Operating Conditions	
Operating Pressure (psig)	1
Operating Temperature (°F)	212



NAMEPLATE BRACKET

	NAT L BD NO		
	CERTIFIED BY		
	INDUSTRIAL ALLOY FABRICATORS INC		
	ROCKFORD VIRGINIA		
MAWP	0 1148 VAC	25 PSIG	4 212
MDMT	20 F	4 25	PSIG
JKT MAWP		PSIG	4
JKT MDMT	F	4	PSIG
JNT COIL		PSIG	4
SERIAL NO	F958 2	YR BUILT	1994
PLANT BALTIMORE			
P O NO	BL 9435898 -S		
EQUIP NO	V-6601	PROJ NO	321

NAMEPLATE DETAIL

NOZZLE SCHEDULE												
REPAD	SIZE	MK	SIZE	SCH	NO	DESCRIPTION					SERVICE	DETAIL
		C	3"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	CONDUCTIVITY LEVEL PROBE	1
		D	3"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	DRAIN	2
		E	6"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	EMERGENCY VENT	1
		I	2"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	INLET W LINED BF	3
		IP	1 1/2"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	INLET DIP PIPE	3
		L	3"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	LEVEL-d/p CELL	2
		M	20"	3/8"	1	150#	LJ	FLG	W BF &	PL FAB LJSE	MANWAY W/DAVIT	4&5
		N	3"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	NITROGEN PAD	1
		SI	4"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	SPARE W LINED BF	1
		V	3"	40S	1	150#	ANSI	LJ	FLG	W PL FAB LJSE	CONSERVATION VENT	1

DESIGN DATA

- 1 DESIGN PRES & TEMP - 0.1448 PSIG VAC & 2.5 PSIG @212°F
2 CORROSION ALLOWANCE 125" SHELL & HEADS ONLY
3 SPEC GRAVITY OF CONTENTS 1.04
4 HYDROTEST 7 PSIG
5 SPOT RADIOGRAPH 100%
6 WIND LOAD 100 MPH
7 SEISMIC ZONE 1
8 DYE PENETRANT CHECK ALL PRESSURE WELDS

MATERIAL

HEADS & SHELL	SB 688 ALLOY AL 6XN	1.4 STUB END - SB-688 ALLOY AL-6XN
NOZ NECKS	SB 675 ALLOY AL 6XN	LIFTING LUGS- SA-240 304 S/S
DIP PIPES -	SB-675 ALLOY AL-6XN	SUPT LUGS- SA-240 304 S/S
MANWAY NECK	SB 688 ALLOY AL-6XN	BOLTING - SA-193 B7/SA 194 2H
FLANGES -	SA105	INSUL SUPTS - SA-240 304 S/S
BLIND FLGS -	SA 105 W AL 6XN LINING	GASKETS - 1/4" THK TEFLON ENVELOPE

WELDING PROCEDURES

NO	PROCESS	ROD	NOTES	NO	PROCESS	ROD	NOTES
222	(GTAW)	ErNiCrMo-3	P45-P45	93	(SMAW)	E7018	P1-P1
223	(GTAW)	ErNiCrMo-3	P45-P1	87	(GTAW)	E71T-1	P1-P1

ErNiCrMo-3 - INCO 625

CONSTRUCTION NOTES

- 1 VESSEL TO BE DESIGNED & CONSTRUCTED PER ASME CODE, SEC VIII, DIV 1.
1992 ED. ALSO PER SPECS
- 2 ASME CODE STAMP NOT REQ'D
- 3 FLANGE FACE FINISH = MFR'S STD
- 4 NOZZLE BOLT HOLE TO STRADDLE 0.180 CENTERLINE, OR ITS PARALLEL.
- 5 INSIDE NOZZLE PROJECTION=0" UNLESS NOTED OTHERWISE
- 6 NOZZLES "C", "D" & "E" TO BE GROUND FLUSH
- 7 SHELL & HEAD JOINTS TO BE FULL PENETRATION BUTT JOINTS. NOZZLE NECK TO
SHELL OR HEAD JOINTS TO BE FULL PENETRATION
- 8 INTERNAL WELDS TO BE REASONABLY SMOOTH BUT NOT NECESSARILY RIPPLE FREE
OR GROUND SMOOTH
- 9 INSIDE SURFACE OF COMPLEVES TO BE FREE OF WELD FLUX SPATTER, ARC BURNS,
GOUGES, TOOL MARKS, OIL, GREASE, PAINT, INK, DUST & GENERAL SHOP SOIL TO
PROVIDE A MUTUALLY ACCEPTABLE WORKMANLIKE PRODUCT
- 10 CUSTOMER INSPECTION REQ'D
- 11 TEST GASKETS TO BE SAME COMPRESSIBILITY AS SERVICE
- 12 GASKETS FOR BLANKEED CONNECTIONS USED IN SHOP TESTING, WHERE BLIND FLGS
ARE FURNISHED AS PART OF THE P.O. SHALL BE SHIPPED IN PLACE. NEW GASKETS
SHALL BE SHIPPED SEPARATELY
- 13 PRESSURE BOLTING SUPPLIED WITH VESSEL TO BE USED FOR TESTING
- 14 PAINTING - C/S MATH ONLY SHALL BE CLEANED PER SSPC SP10 & PRIMED W/
CARBOZINC 41 Hg INORGANIC ZINC 2.5 CO MILS DFT 0.3 MILS NOMINAL COLOR
GREEN CONFORMANCE TO THICKNESS SPEC WILL BE MEASURED ACCORDING TO
SSPC-PA2

IAF REF DWGS B-7029

REFERENCE

CUST PO NO BL-9435898-S
ITEM NO V-6601
PROJ NO 321
SPEC NO 4002

DESTINATION BALTIMORE, MARYLAND

INDUSTRIAL ALLOY FABRICATORS, INC.
500 VALLEY ROAD RICHMOND VA 23222

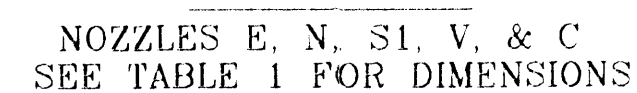
a WILLIAMS INDUSTRIES INCORPORATED company

MCT/WATER SPLIT TANK
FOR FMC

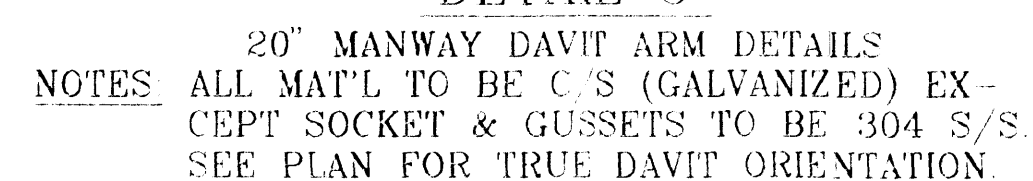
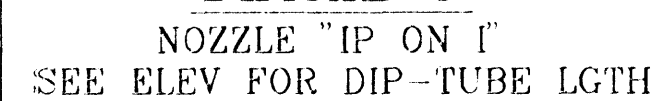
PLANT BALTIMORE

[illegible]

V 6601



NOM PIPE SIZE "A"	LAP THK "I"	OD LAP "C"	WELD "w ₁ "	SIZES "w ₂ "	RADIUS "R"	STUD NO	BOLTS SIZE
1"	.133"	2"	$\frac{3}{16}$	$\frac{3}{16}$	.12"	4	$\frac{1}{2}$ "-13UNC
1 $\frac{1}{2}$ "	.145"	2 $\frac{7}{8}$ "	$\frac{3}{16}$	$\frac{3}{16}$	.25"	4	$\frac{1}{2}$ "-13UNC
2"	.154"	3 $\frac{5}{8}$ "	$\frac{3}{16}$	$\frac{3}{16}$	.31"	4	$\frac{5}{8}$ "-11UNC
3"	.216"	5"	$\frac{1}{4}$	$\frac{1}{4}$	.38"	4	$\frac{5}{8}$ "-11UNC
4"	.237"	6 $\frac{3}{16}$ "	$\frac{1}{4}$	$\frac{1}{4}$	.44"	8	$\frac{5}{8}$ "-11UNC
6"	.280"	8 $\frac{1}{2}$ "	$\frac{5}{16}$	$\frac{5}{16}$	.50"	8	$\frac{3}{4}$ "-10UNC

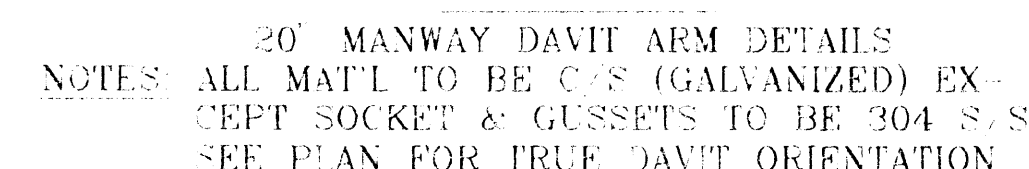
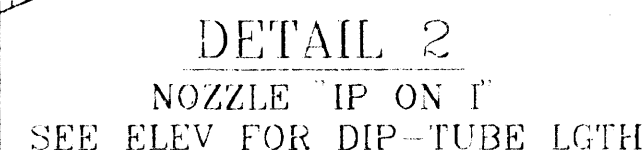


A		REV PER CUST REQUEST		RJG	LML	5-11-94	DRAWN RJG 3-23-94	CHECKED LML 3-28-94	SCALE	JOB NO F958-2	REV
MARK		DIVISION DESCRIPTION		BY	CKD	DAIR	CRITIQUED			D-7029	A

APPROVED



NOM PIPE SIZE "A"	LAP THK "I"	OD LAP "C"	WELD "w ₁ "	SIZES "w ₂ "	RADIUS "R"	STUD NO	BOLTS SIZE
1"	133'	2"	$\frac{3}{16}$	$\frac{3}{16}$	12"	4	$\frac{1}{2}$ - 13UNC
1 $\frac{1}{2}$ "	145"	2 $\frac{7}{8}$ "	$\frac{3}{16}$	$\frac{3}{16}$	25"	4	$\frac{1}{2}$ - 13UNC
2"	154"	3 $\frac{5}{8}$ "	$\frac{3}{16}$	$\frac{3}{16}$	31"	4	$\frac{5}{8}$ - 11UNC
3"	216"	5"	$\frac{1}{4}$	$\frac{1}{4}$	38"	4	$\frac{5}{8}$ - 11UNC
4"	237"	6 $\frac{3}{8}$ "	$\frac{1}{4}$	$\frac{1}{4}$	44"	3	$\frac{5}{8}$ - 11UNC
6"	280"	8 $\frac{1}{2}$ "	$\frac{5}{16}$	$\frac{5}{16}$	50"	8	$\frac{3}{4}$ - 10UNC



REFERENCE
CUST PO NO: BL-9435898-S
ITEM NO: V-6602 *Trans*
PROJ NO 321
SPEC NO 4002

INDUSTRIAL ALLOY FABRICATORS, INC.
500 VALLEY ROAD RICHMOND, VA 23222

a WILLIAMS INDUSTRIES INCORPORATED company

MeOH/ACN HOLD TANK
NOZZLE DETAILS
FOR FMC
PLANT: BALTIMORE

A	REV PER CUST REQUEST	RJG	LML	5-11-94	DRAWN RJG 3-25-94	CHECKED LML 3-28-94	JOB NO F958-3	REV
MARK	REVISION DESCRIPTION	BY	CK'D	DATE	CERTIFIED	SCALE	D-7031	A