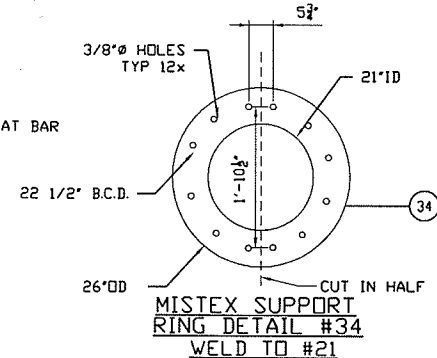
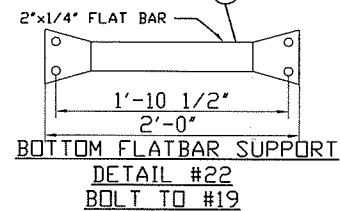
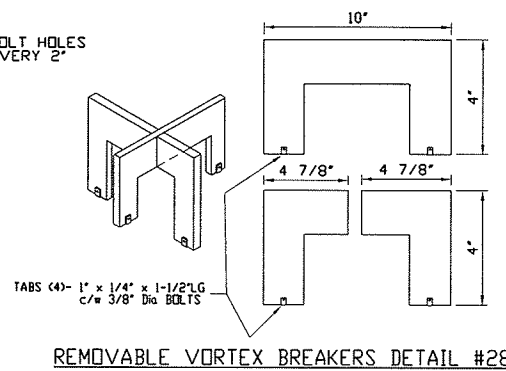
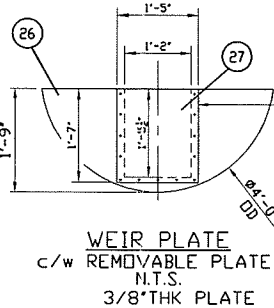
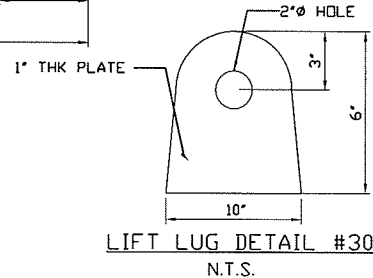
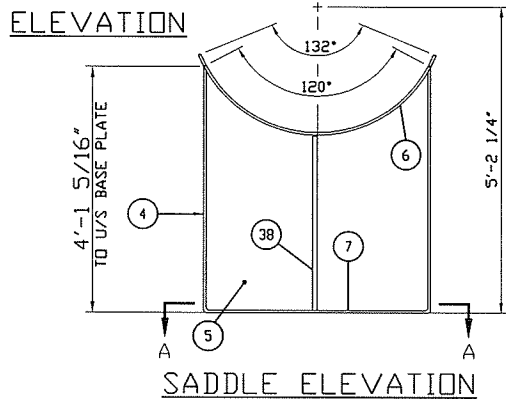
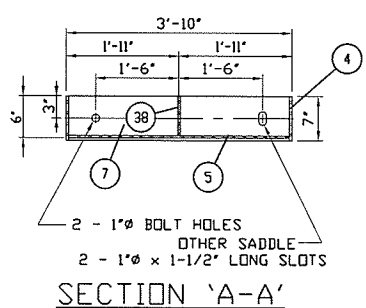
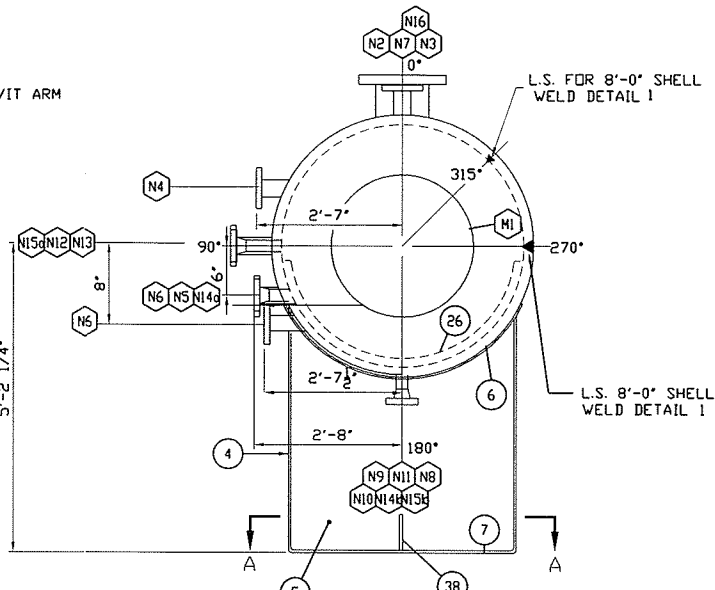
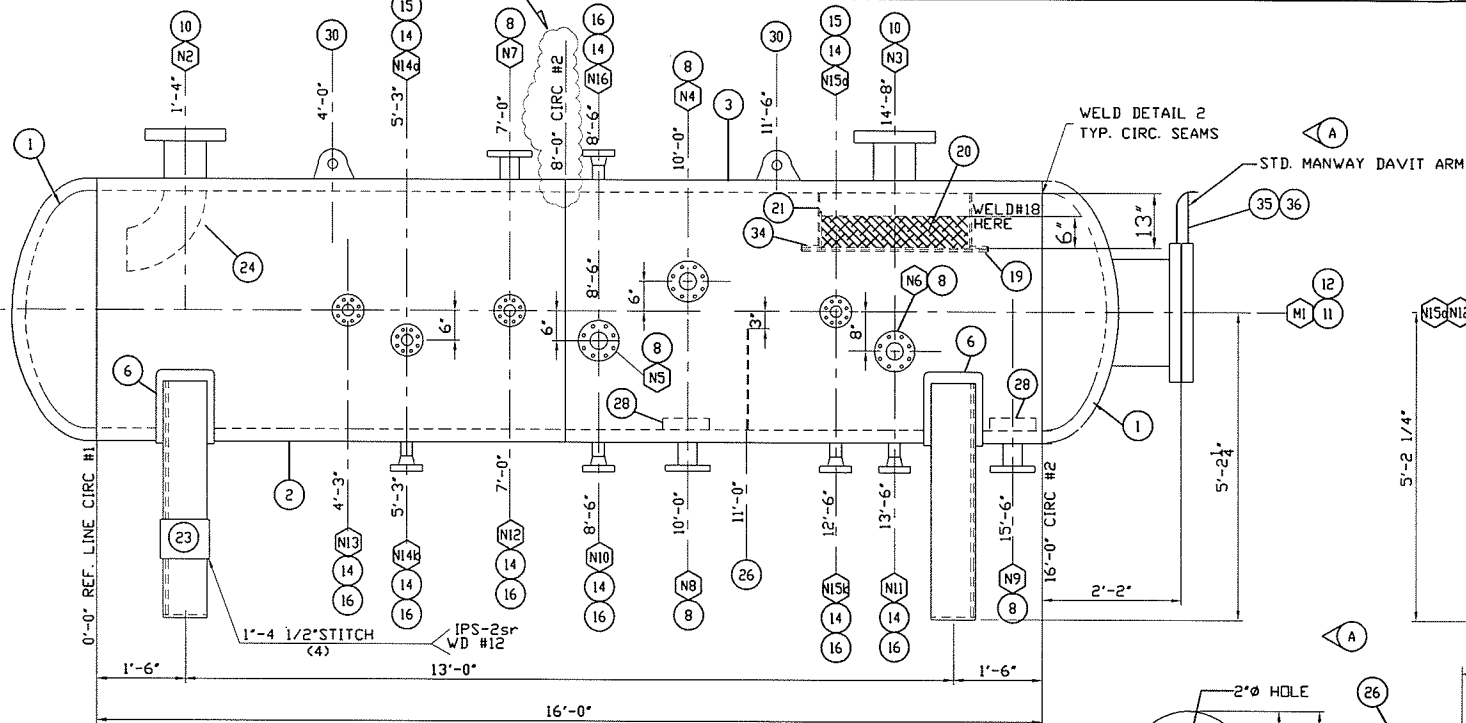


IMPORTANT: WELD AND X-RAY
CENTER CIRC #2 BEFORE
CUTTING HOLES FOR NOZZLES.

WELD DETAIL #1 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-8sr	WELD DETAIL #2 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-8sr	WELD DETAIL #3 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #4 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #5 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #6 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #7 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #8 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #9 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #10 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #11 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #12 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #13 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr	WELD DETAIL #14 WITHOUT BACKING R= 1/8" (MIN.) a= 60° (MIN.) F= 1/16" (MIN.) WPS IPS-2sr
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BILL OF MATERIALS

MK	QTY.	DESCRIPTION	MATERIAL
1	2	HEADS: 48" ID x 2" NOM THK. (1.91" MIN.) 2:1 SE C/W 2" SF	SA-516-70N
2	1	SHELL PLATE: 48" ID x 8'-0" S/S x 2" THK.	SA-516-70N
3	1	SHELL PLATE: 48" ID x 8'-0" S/S x 2" THK.	SA-516-70N
4	4	SIDE PLATE: 6' x 7/8" THK x 4'-1" LONG (SHOP FIT)	SA-36
5	2	FACE PLATE: 3'-10" x 3/8" THK x 4'-1" LONG (SHOP FIT)	SA-36
6	2	WEAR PLATE: 60" LONG x 8' x 3/8" THK. (ROLL TO 52" ID)	SA-516-70N
7	2	BASE PLATE: 3'-10" LONG x 7' x 3/4" THK.	SA-36
8	6	FLANGE 3" CL600 RFHB (2.90" ID x 1.24" WALL) x 11" LG-CTS	SA-105N
9			
10	2	FLANGE 8" CL600 RFHB (7.62" ID x 2.16" WALL) x 14" LG	SA-105N
11	1	MANWAY FLANGE 18" CL600 RFHB c/w 18" ID (2.60" WALL) x 20" LONG	SA-105N
12	1	BLIND FLANGE: 18" CL600 RF	SA-105N
13			
14	9	FLANGE 2" CL600 RFWN SCH 160 BORE	SA-105N
15	1	PIPE 2" NPS SMLS SCH 160 x 6 1/2" LONG	SA-106-B
16	8	PIPE 2" NPS SMLS SCH 160 x 5 3/8" LONG	SA-106-B
18	8	FLAT PLATE TABS: 1' x 2" x 1/4" THK	SA-36
19	1	PLATE: 26" OD x 18" ID x 12" WIDE SEE DETAIL c/w	SA-36
		EXP. METAL: 1/2" THK x 3 POUNDS/FOOT - C.T.S	
20	1	MISTEX PAD: 20" OD x 6" THK x 9 LBS/CU. FT.-SEE DETAIL	316 S.S.
21	1	MISTEX SUPPORT: PLATE ROLLED TO 21" OD x 3/8" THK x 1'-1" LG	SA-36
22	1	FLAT BAR: 2" WD x 1/4" x 2'-0" LONG	SA-36
23	1	NAME PLATE: 10" x 8" x 1/8"	SA-36
24	1	INLET DEFLECTOR: 8" 90° LR ELBOW Sch. STD.	SA-234-WPB
25	10	FLAT BAR: 1" WD x 1/4" THK x 2" LG	SA-36
26	1	WEIR PLATE: 21" LG x 48" OD x 3/8" THK c/w REMOVABLE PLATE - SEE DETAIL	SA-36
27	1	REMOVABLE PLATE c/w 3/8" Dia BOLTS C.T.S. - SEE DETAIL	SA-36
28	2	REMOVABLE VORTEX BREAKERS: 10" x 4" x 1/4" THK STD- SEE DETAIL	SA-36
29			
30	2	LIFT LUG PLATE: 1" THK x 6" x 10" SEE DETAIL	SA-516-70N
31	10	FLAT BAR: 1" WD x 1/4" THK x 2" LONG	SA-36
32	4	FLAT BAR: 1" WD x 1/4" THK - C.T.S.	SA-36
34	1	MISTEX SUPPORT PLATE: 26" OD x 21" ID x 1/4" THK - CUT IN HALF	SA-36
35	1	STANDARD DAVIT ARM	SA-51670N
36	1	2" NPS SCH.160 SMLS PIPE FOR DAVIT ARM	SA-106B
37			
38	2	RIB PLATE: 7/8" THK x 6" x 2'-11 1/2" C.T.S.	SA-36



AS BUILT

NOTE: REMEMBER TO ADD COUPON
WITH LONGSEAM

MAWP EQUALS DESIGN PRESSURE
C.T.S. - CUT TO SUIT
TOLERANCE SPEC AS PER DMV-2002TOL Rev.0
REFERENCE DWG: IPS-48H-144 REV.0
WPS: IPS-8sr, IPS-2sr
HEADS, SHELLS, FVC, & REPADS ARE FINE GRAINED PRACTICE

DESIGN DATA
SIGN AND FABRICATE TO ASME CODE, SECTION VIII DIV. 1 2001 EDITION, 2003 ADDENDA
SIGN PRESSURE & TEMPERATURE: 1440 PSIG AT 130°F. PREHEAT: 200°F. MDMT: -20°F @ 1440 PSIG
IMPACT TESTS: HEADS/SHELLS PRODUCTION IMPACT TEST AS PER UG-84 TO -20°F. OTHER MATERIAL
EXEMPT PER UCS-66 FIG.1, UCS-68(c), UCS-66(b)(2), UCS-66(b)(1)(b), UG-20f &
UCS-66(c)
RADIOGRAPHY: LONG & CIRC. SEAM FULL PER UW-11a
POST WELD HEAT TREATMENT: 1150°F FOR 120 MIN. HYDROSTATIC TEST PRESSURE: 2160 PSIG
HEAD MINIMUM THICKNESS: 1.91" CORROSION ALLOWANCE: 1/8"
WEIGHT EMPTY: 23500 LBS. WEIGHT FULL OF WATER: 40000 LBS
STUD & NUTS FOR MANWAY ARE SA-193 B7M & SA-194-2HM/ CAPACITY 213 CU. FT.

OFFICE MNGR: _____ DATE: _____ LAYOUT DONE BY: _____
ISSUED TO FAB MNGR: _____ DATE: _____ CHECKED BY: _____

NOZZLE WELD SCHEDULE

MARK	SIZE	SCH.	RTG.	TYPE	SERVICE	LOCATION	OSP	ISP (h)	WELD DETAIL	A FILLET	B FILLET	C FILLET	NOZZLE CUT LENGTH
M1	18"	F.V.C.	CL600	RFHB	MANWAY/INSP.	HEAD	AS SHWN	2"	5	1/2"	-	-	19 3/8"
N2	8"	F.V.C.	CL600	RFHB	INLET	SHELL	10"	3/4"	5	3/8"	-	-	14"
N3	8"	F.V.C.	CL600	RFHB	GAS OUTLET	SHELL	10"	SF	6	3/8"	-	-	13 1/4"
N4	3"	F.V.C.	CL600	RFHB	HLSD	SHELL(tan)	AS SHWN	SF	6	3/8"	-	-	10 1/8"
N5	3"	F.V.C.	CL600	RFHB	H2O LC CAGE	SHELL(tan)	AS SHWN	SF	6	3/8"	-	-	10 1/8"
N6	3"	F.V.C.	CL600	RFHB	COND. LC	SHELL(tan)	AS SHWN	SF	6	3/8"	-	-	10 1/2"
N7	3"	F.V.C.	CL600	RFHB	PSV	SHELL	8"	SF	6	3/8"	-	-	10 5/8"
N8	3"	F.V.C.	CL600	RFHB	H2O OUT	SHELL	8"	SF	6	3/8"	-	-	10 5/8"
N9	3"	F.V.C.	CL600	RFHB	HC OUT	SHELL	8"	SF	6	3/8"	-	-	10 5/8"
N10	2"	160	CL600	RFWN	H2O DRAIN	SHELL	6"	GF	6 & 4	3/8"	-	-	5 3/8"
N11	2"	160	CL600	RFWN	HC DRAIN	SHELL	6"	GF	6 & 4	3/8"	-	-	5 3/8"
N12	2"	160	CL600	RFWN	PI	SHELL	6"	SF	6 & 4	3/8"	-	-	5 3/8"
N13	2"	160	CL600	RFWN	TI	SHELL	6"	SF	6 & 4	3/8"	-	-	5 3/8"
N14a	2"	160	CL600	RFWN	SPARE	SHELL(tan)	AS SHWN	SF	6 & 4	3/8"	-	-	6 1/2"
N14b	2"	160	CL600	RFWN	WATER DRN	SHELL	6"	GF	6 & 4	3/8"	-	-	5 3/8"
N15a	2"	160	CL600	RFWN	HC LG	SHELL	6"	SF	6 & 4	3/8"	-	-	5 3/8"
N15b	2"	160	CL600	RFWN	HC LG	SHELL	6"	SF	6 & 4	3/8"	-	-	5 3/8"
N16	2"	160	CL600	RFWN	SPARE	SHELL	6"	SF	6 & 4	3/8"	-	-	5 3/8"



DATE: 04-12-15
DESIGNED BY: IPS
DRAWN BY: C.PRICHARD
CHECKED BY: _____
APPROVED BY: _____
SCALE: N.T.S.

IPS MANUFACTURING LIMITED

TITLE: HORIZONTAL VESSEL DRAWING
48" ID x 16'-0" S/S
1440 PSIG @ 130°F, 1/8" C.A.

PROJECT NO: 3201-001
DRAWING NO: R-7101.2

SHEET NO: 1 OF 1
REV. NO: _____

0	NO	1	AS BUILT: 8 TO 16, 36	CMP	PP	CP	RS	05-10-03
0	NO	0	ISSUED FOR CONSTRUCTION	CP	PP	CP	RS	04-12-15
CALC	PKG	REV	LEVEL	REV	CALCS	REQ'D	REV	DESCRIPTION
BY	DD	PC	QC	DATE				