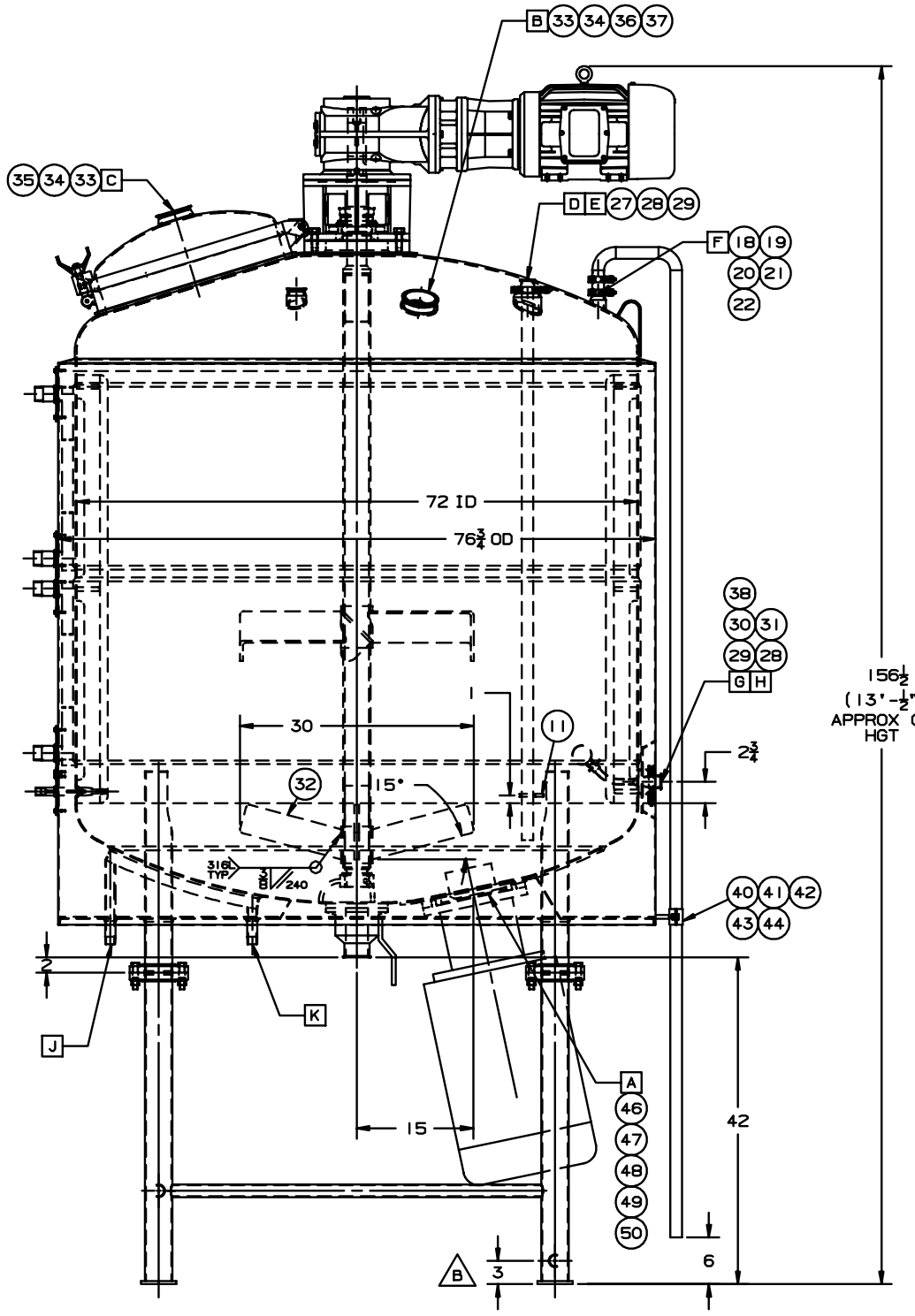
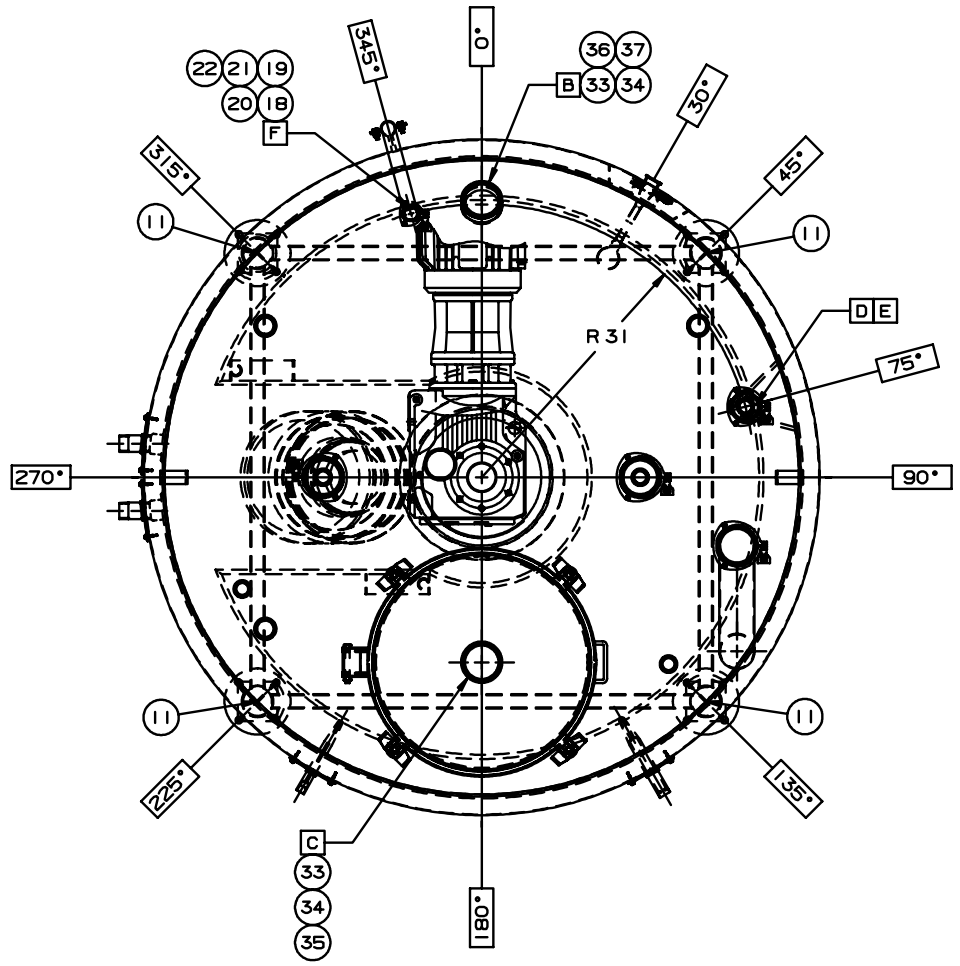


SEE TOP VIEW FOR TRUE NOZZLE ORIENTATIONS



TOP VIEW

NOTES:

1. ALL CUSTOMER SUPPLIED PARTS MUST HAVE PROPER IDENTIFICATION, PARTIAL DATA, AND MILL TEST REPORTS BEFORE BEING WELDED TO VESSEL.
2. IF THIS EQUIPMENT IS USED IN CONTACT WITH CORROSIVE MATERIALS (SALT, CHLORIDES, HALOGENS OR OTHER CORRODENTS) DCI, INC. WILL NOT BE RESPONSIBLE FOR THE CORROSION RESISTANCE, OR THE RESULTING DAMAGE, WITHOUT WRITTEN ACCEPTANCE OF SUCH CORROSIVE CONDITIONS BY DCI, INC. BASED UPON A SPECIFIC INTENDED USE AND/OR SERVICE.
3. ALL TOLERANCES ARE IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, 1995, CURRENT ADDENDA, AND DCI DWG. D020000.
4. ALL ASME WELDING TO BE DONE BY ASME CERTIFIED WELDERS.
5. ALL ASME WELDING PROCEDURE ARE IN ACCORDANCE WITH ASME CODE UW-29.
6. ASME CODE JURISDICTION ENDS AT THE FIRST SEALING SURFACE EXCLUDING MANWAY.
7. ALL FLANGES WILL HAVE BOLT HOLES STRADDLE THE 0°-180° & 90°-270° CENTERLINES, UNLESS SPECIFIED OTHERWISE.
8. VESSEL AND/OR HEAT TRANSFER SURFACE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1., 1995, CURRENT ADDENDA.
9. VESSEL AND/OR HEAT TRANSFER SURFACE TO BE HYDROSTATICALLY TESTED PER UG-99 AND DCI PROC X-7033. CHECK FOR DEFECTS, REPAIR AND RETEST IF NECESSARY.
10. SUITABLE PRESSURE AND/OR VACUUM RELIEF DEVICES MUST BE INSTALLED BY CUSTOMER FOR OPERATION OF VESSEL AND/OR HEAT TRANSFER SURFACE.
11. PRODUCTION TO PROVIDE PROTECTION FOR ALL NOZZLES AND FITTINGS PRIOR TO SHIPMENT. VESSEL MUST BE ADEQUATELY VENTED.
12. WELD SEAMS IN VESSEL HEAD AND SHELL SHOULD BE LOCATED WHERE POSSIBLE TO AVOID ALL NOZZLES, ACCESS OPENINGS, AND REINFORCEMENT PADS.
13. ALL REINFORCEMENT PADS MUST BE PROVIDED WITH (1) ONE 1/8" DIA. WEEP HOLE LOCATED AT THE LOWEST POINT WHEN THE VESSEL IS IN ITS NORMAL OPERATING POSITION.
14. RUPTURE DISC DATA: 1½" BS4B GFR-S, 27-30 PSIG @ 72°F MANUFACTURING RANGE MAXIMUM OPERATING PRESSURE IS 90% OF BURST RATING
15. ORIGINAL DCI DWG NO.: D178134
    SERIAL NO.: 97-PH-56721
    NATIONAL BOARD NO.: 3911

ITEM	MATERIAL DESCRIPTION	MATERIAL SPEC	INTERIOR SPECIFIC WELDS	EXTERIOR SPECIFIC WELDS
SHELL	SHT, 10 GA	SA240,316L	240 240	— —
TOP HEAD	PLATE, 1/4" THK	SA240,316L	240 240	240 240
BTM HEAD	PLT, 1/4" THK	SA240,316L	240 240	— —
SHELL HEAT TRANS	SHT, 14 GA	SA240,304	— —	— —
HEAD HEAT TRANS	SHT, 14 GA	SA240,304	— —	— —
SHELL SHEATHING	SHT, 14 GA	SA240,304	— —	240 240
BTM HD SHEATHING	SHT, 14 GA	SA240,304	— —	240 240
BREAST RING	SHT, 12 GA	SA240,304	— —	240 240
LEGS	PIPE, 3" SCH-10	SA312,304	— —	240 240
LEG BRACING	TUBE, 1½" OD, .109 W	SA249,304	— —	240 240
MANWAY GASKET		SILICONE	— —	— —
FERRULE GASKETS		SILICONE	— —	— —
			— —	— —
			— —	— —
			— —	— —

NON-DESTRUCTIVE EXAMINATION

RADIOGRAPHY-VESSEL

TOP HEAD	TOP HEAD TO SHELL	SHELL	BOTTOM HEAD	BTM HEAD TO SHELL
NONE	NONE	NONE	NONE	NONE

RADIOGRAPHY-HEAT TRANSFER

TOP HEAD	TOP HEAD TO SHELL	SHELL	BOTTOM HEAD	BTM HEAD TO SHELL

OTHER: LIQUID PENETRANT EXAMINE

ALTERED BY
W dci INC.
ST. CLOUD, MINNESOTA

VESSEL M.A.W.P. 25/-8.25 P.S.I. AT 300 °F
VESSEL VOLUME 1100 GALLONS
MIN. DESIGN METAL TEMP. -20 °F AT 25 P.S.I.
JACKET M.A.W.P. 150/-15 P.S.I. AT 347 °F
JACKET VOLUME 1 GALLONS
MIN. DESIGN METAL TEMP. -20 °F AT 125 P.S.I.
MFRS. SERIAL NO. JS00804-
2091
NATIONAL BOARD R CERTIFICATE NUMBER
DATE ALTERED

VESSEL TEST PRESSURE: 35 PSIG
JACKET TEST PRESSURE: 188 PSIG

PRODUCT DATA: LOTIONS AND CREAMS
VISCOSITY: 100,000 CPS | SPECIFIC GRAVITY: 1.1
EST EMPTY WEIGHT: 3500 LBS.
EST OPERATING WEIGHT: 13598 LBS.
SEISMIC ZONE: 1

ALTERATION INSTRUCTIONS

1. REMOVE BOTTOM TAPER
2. REMOVE BOTTOM TURBINE BLADES AND REPLACE WITH ITEM #32
3. CUT LEGS AS SHOWN AND ADD FLANGES (#23)
4. REMOVE HEADERS AND CUT OUT BOTTOM DIMPLE JACKET AS SHOWN
5. INSTALL ITEMS #1-5
6. DRILL NEW HEADERS HOLES AND INSTALL NEW HEADERS AND PIPES (#6,7,8,9)
7. CUT OUT SIDE DIMPLE JACKET AS SHOWN
8. INSTALL ITEMS #10 & 15
9. INSTALL BAFFLES (#17)
10. INSTALL TOP HEAD FITTINGS B,D,F
11. INSTALL NOZZLE C IN MANHOLE COVER
12. INSTALL DIP TUBE SUPPORT (#11)
13. INSTALL MANHOLE REINFORCING RING (#16)
14. REFINISH INTERIOR AS REQUIRED
15. HYDROSTATIC TEST JACKETS AND VESSEL
16. SEE BILL OF MATERIAL FOR REMAINING ITEMS

REV	REVISION DESCRIPTION	REV BY/DATE
E		
D		
C	CHANGED NAME PLATE TO READ 1100 GALLONS	PITT 12-22-99
B	MOVED LOCTION OF (1) LEG BRACE	PITT 11-24-99
A	ADDED ITEMS #46-50	PITT 10-19-99

MK	DESCRIPTION	SERVICE	QTY
K	1" NPT MALE PIPE	DIMPLE JACKET CONNECTION	1
J	1" NPT MALE PIPE	DIMPLE JACKET CONNECTION	1
H	1-1/2" TRI-CLAMP	CIP	1
G	3" TRI-CLAMP	CIP ACCESS	1
F	1-1/2" TRI-CLAMP	RUPTURE DISC	1
E	1-1/2" TRI-CLAMP	DIP TUBE	1
D	3" TRI-CLAMP	DIP TUBE ACCESS	1
C	4" TRI-CLAMP	SIGHT GLASS	1
B	4" TRI-CLAMP	LIGHT GLASS	1
A	15" OD PAD FLANGE	AGITATOR	1

NOZZLE SCHEDULE

TITLE: VESSEL ALTERATION #178134, 97-PH-56721, N.B.#3911

DCI ORDER NO.: JS00804-000 | QTY REQD: 1

DIMENSIONS ARE IN INCHES UNLESS SPECIFIED

dci ST. CLOUD, MN

SCALE: 3/32 | DO NOT SCALE DRAWING

PROD	APPVL	CHK
PITT		
DATE 10-6-99	DATE	DATE

PREFIX 189-01 | DWG NO. JS0804 | REV C | SHT 1 OF 2