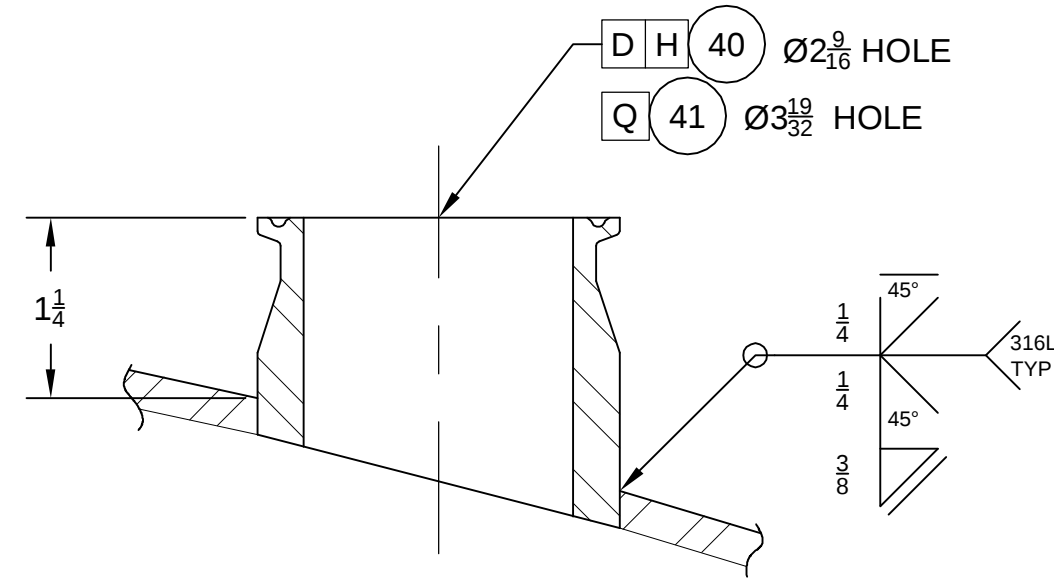
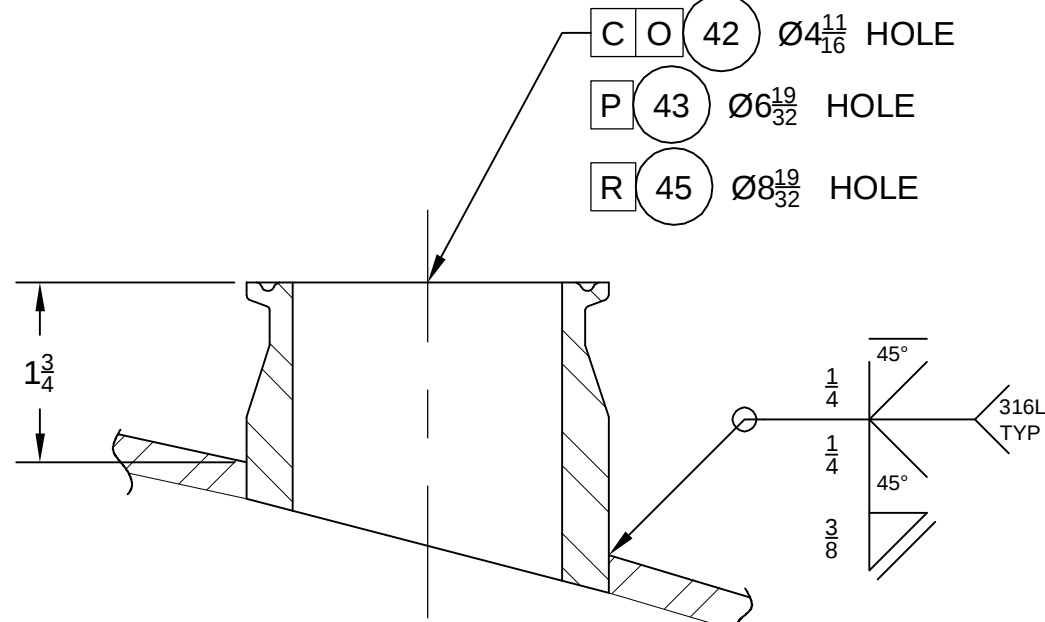
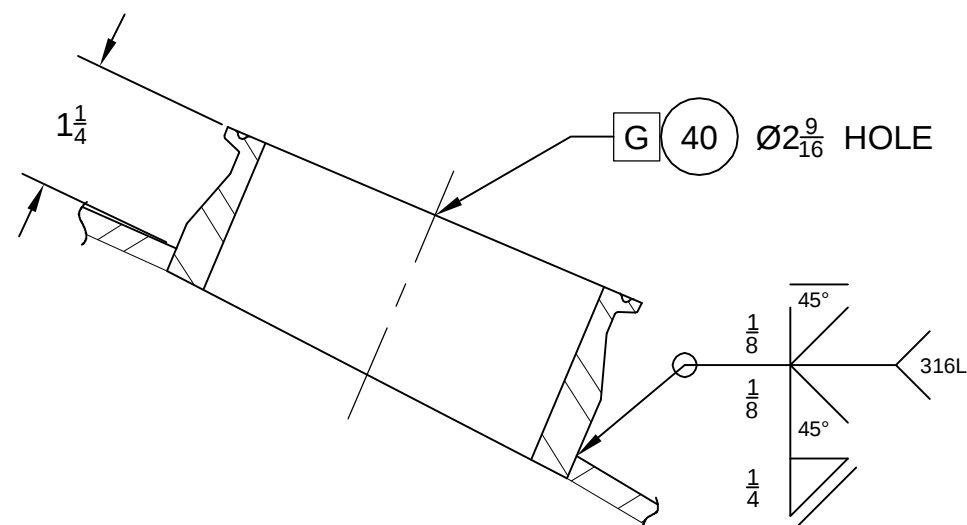




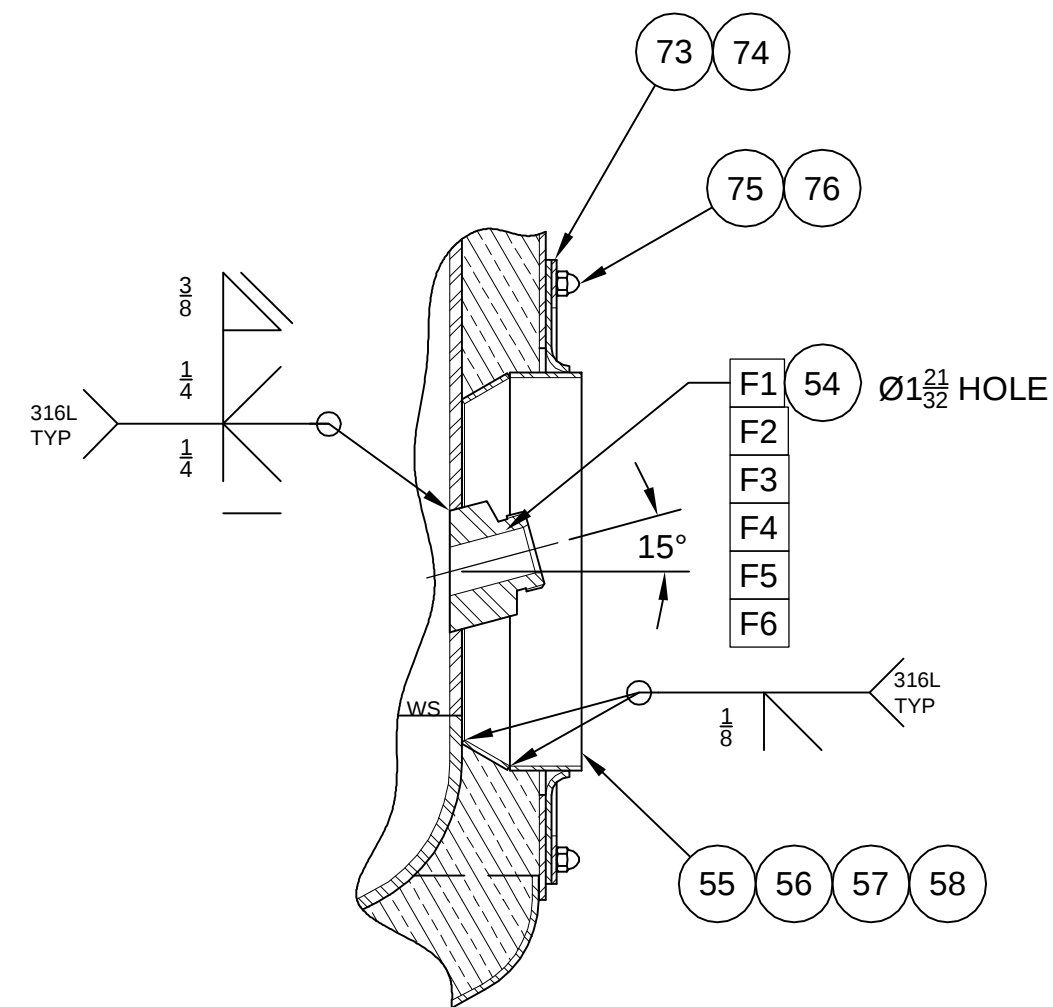
NOZZLES D, H & Q DETAIL



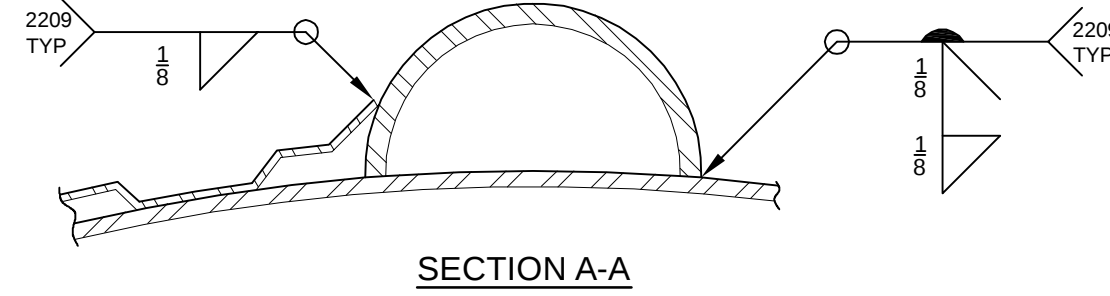
NOZZLES C, O, P, & R DETAIL



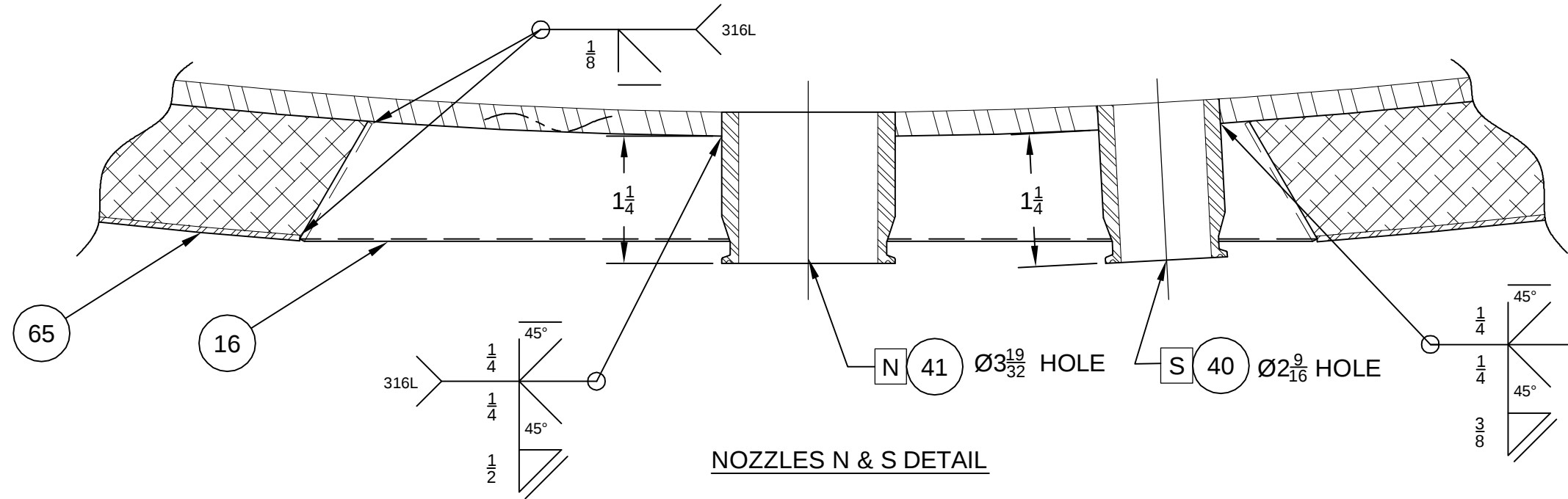
NOZZLE G DETAIL



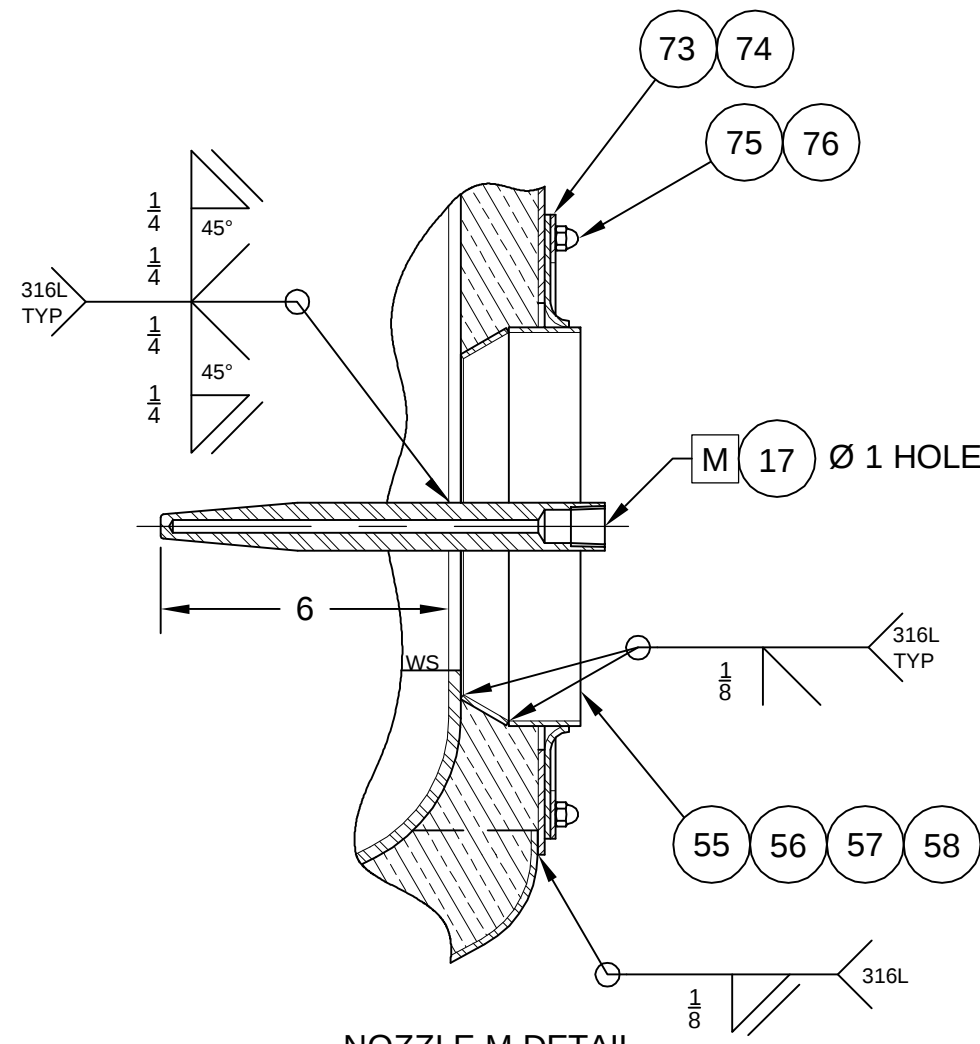
NOZZLE F1, F2, F3, F4, F5, & F6 DETAIL



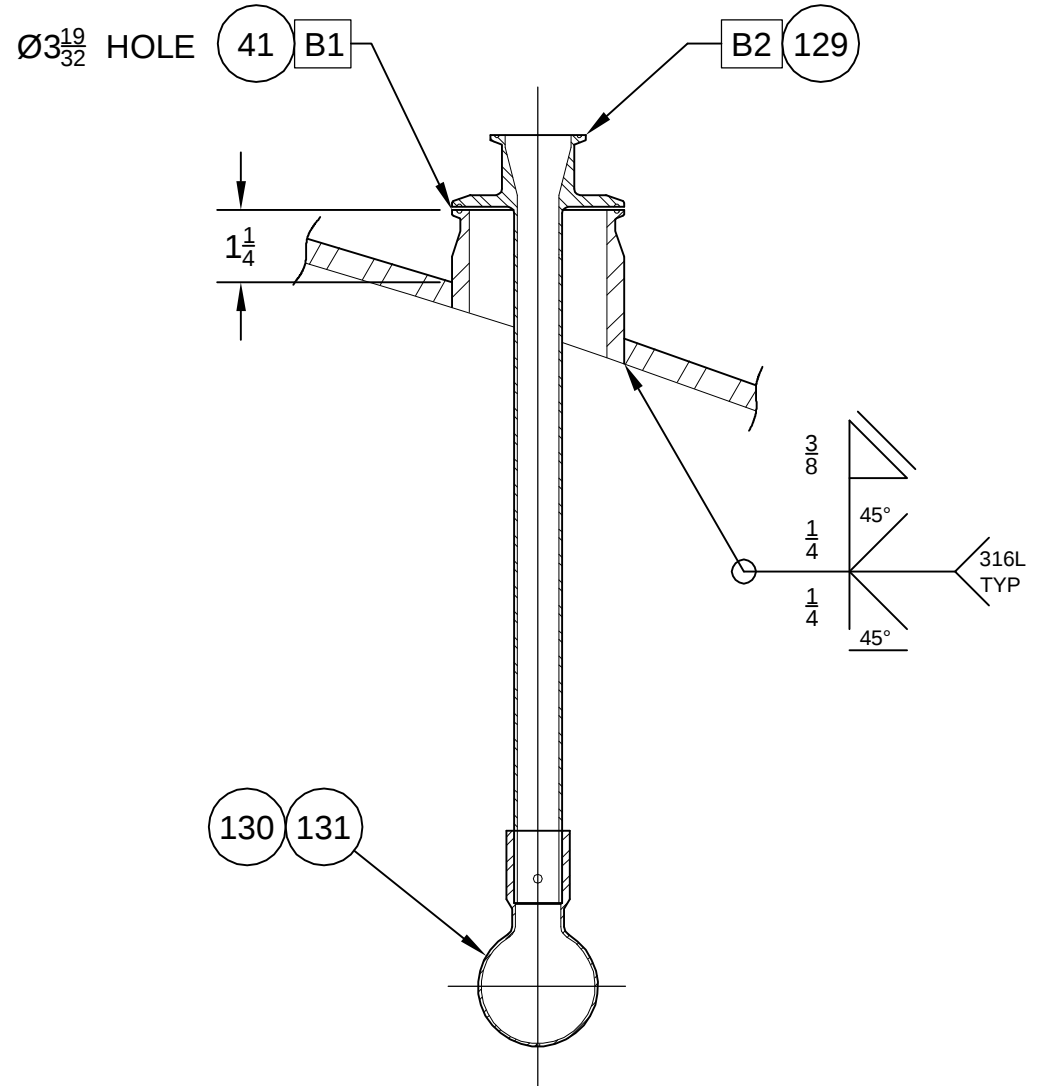
SECTION A-A



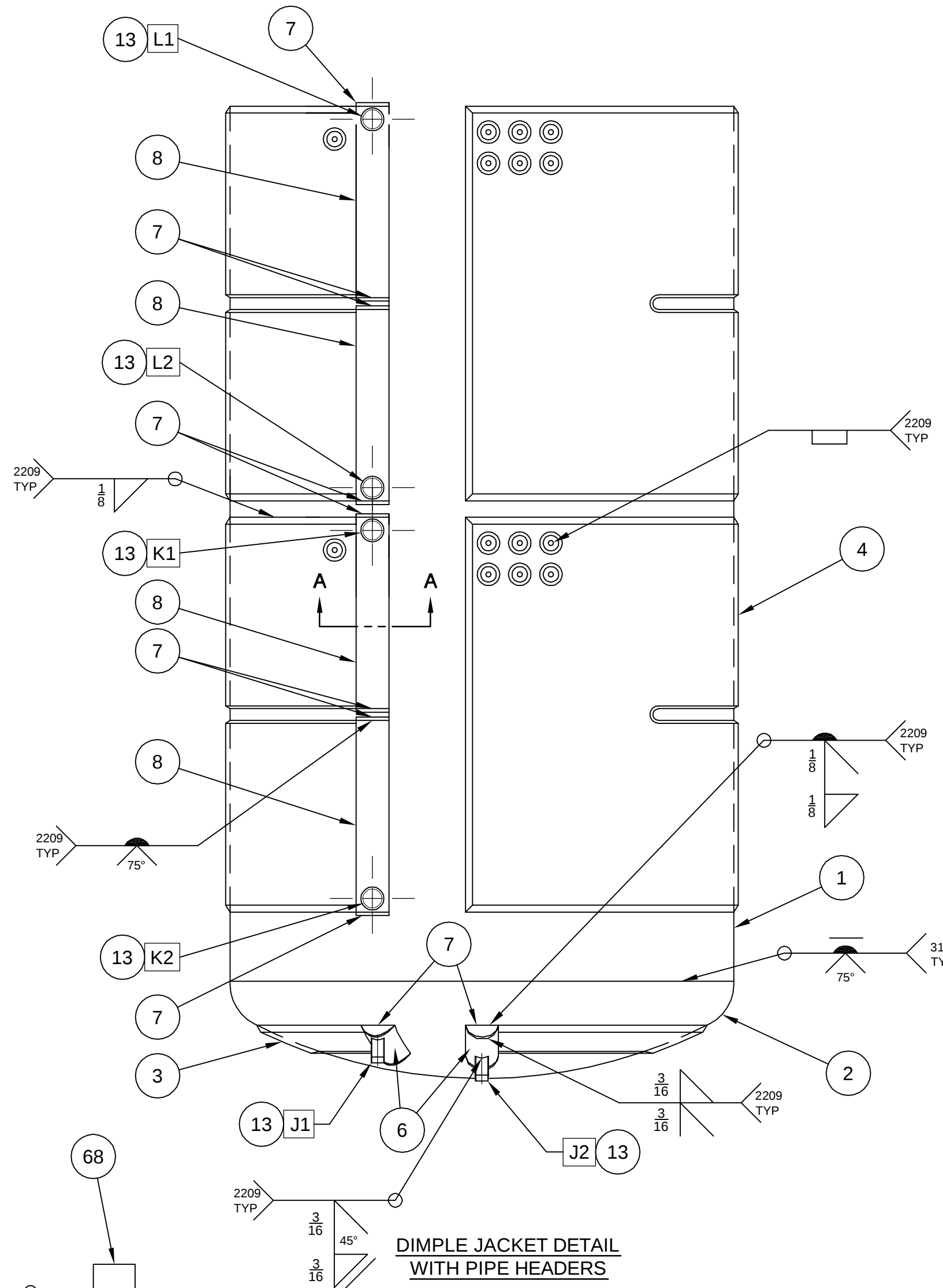
NOZZLES N & S DETAIL



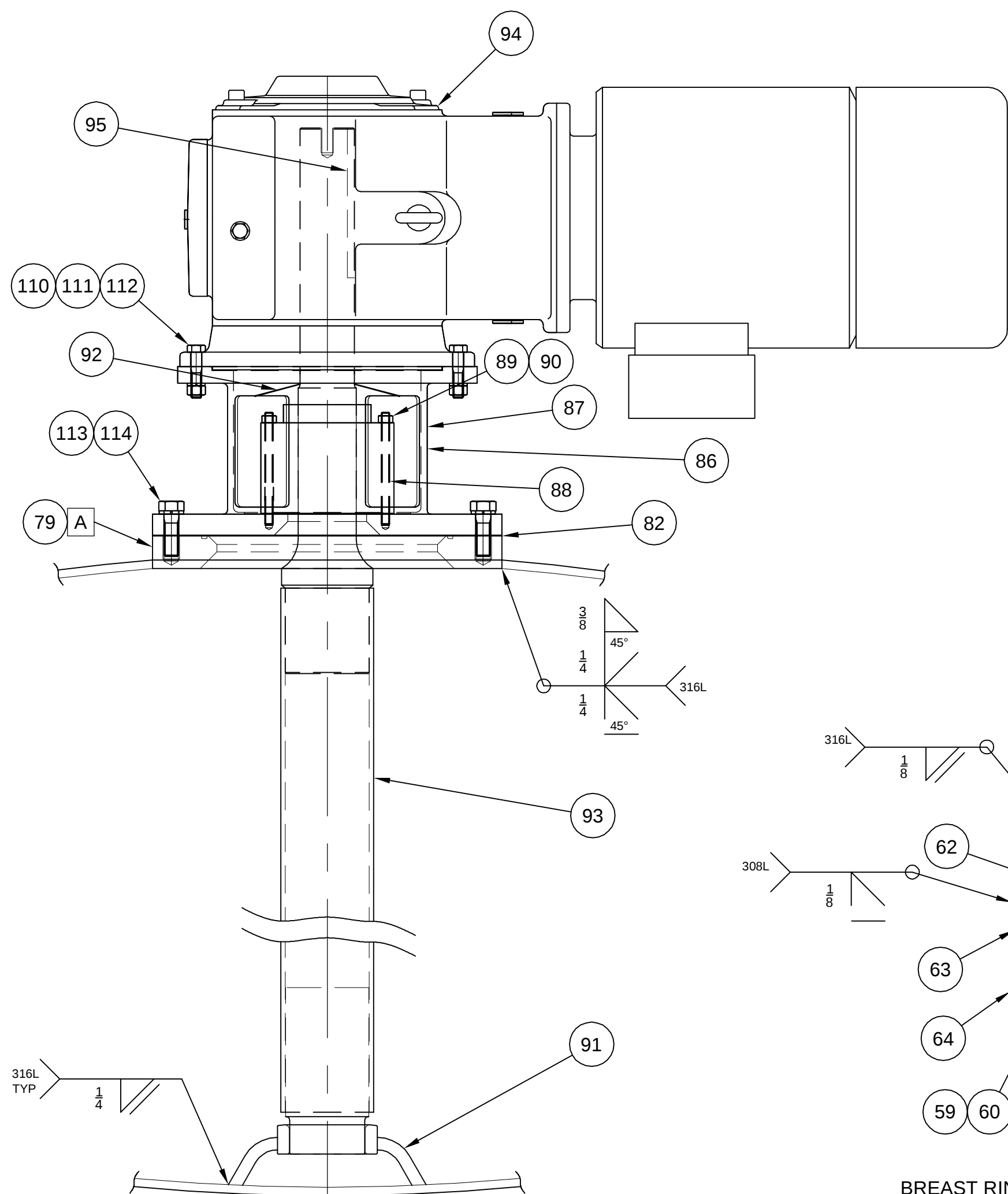
NOZZLE M DETAIL



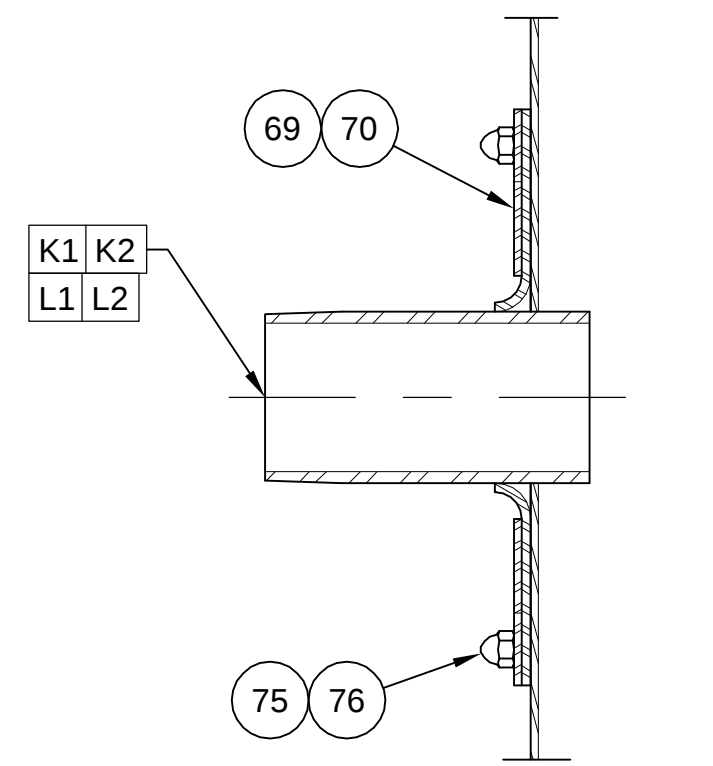
NOZZLE B1 & B2 DETAIL



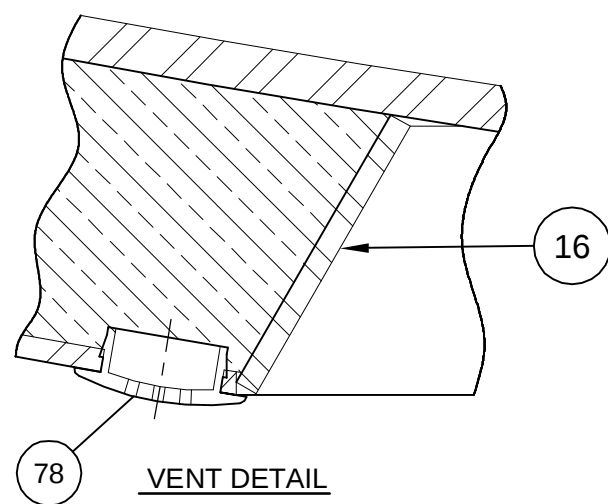
DIMPLE JACKET DETAIL WITH PIPE HEADERS



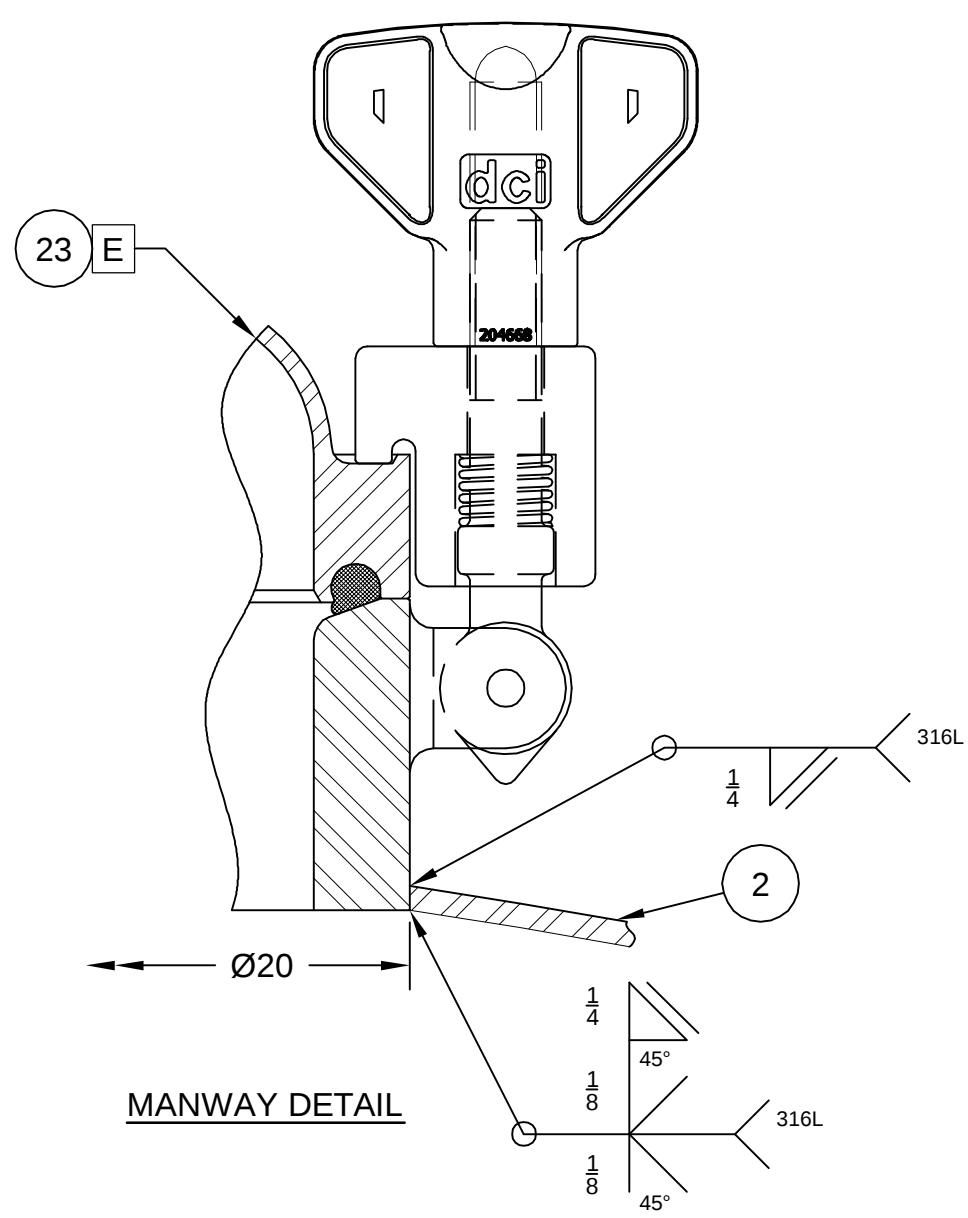
BREAST RING DETAIL



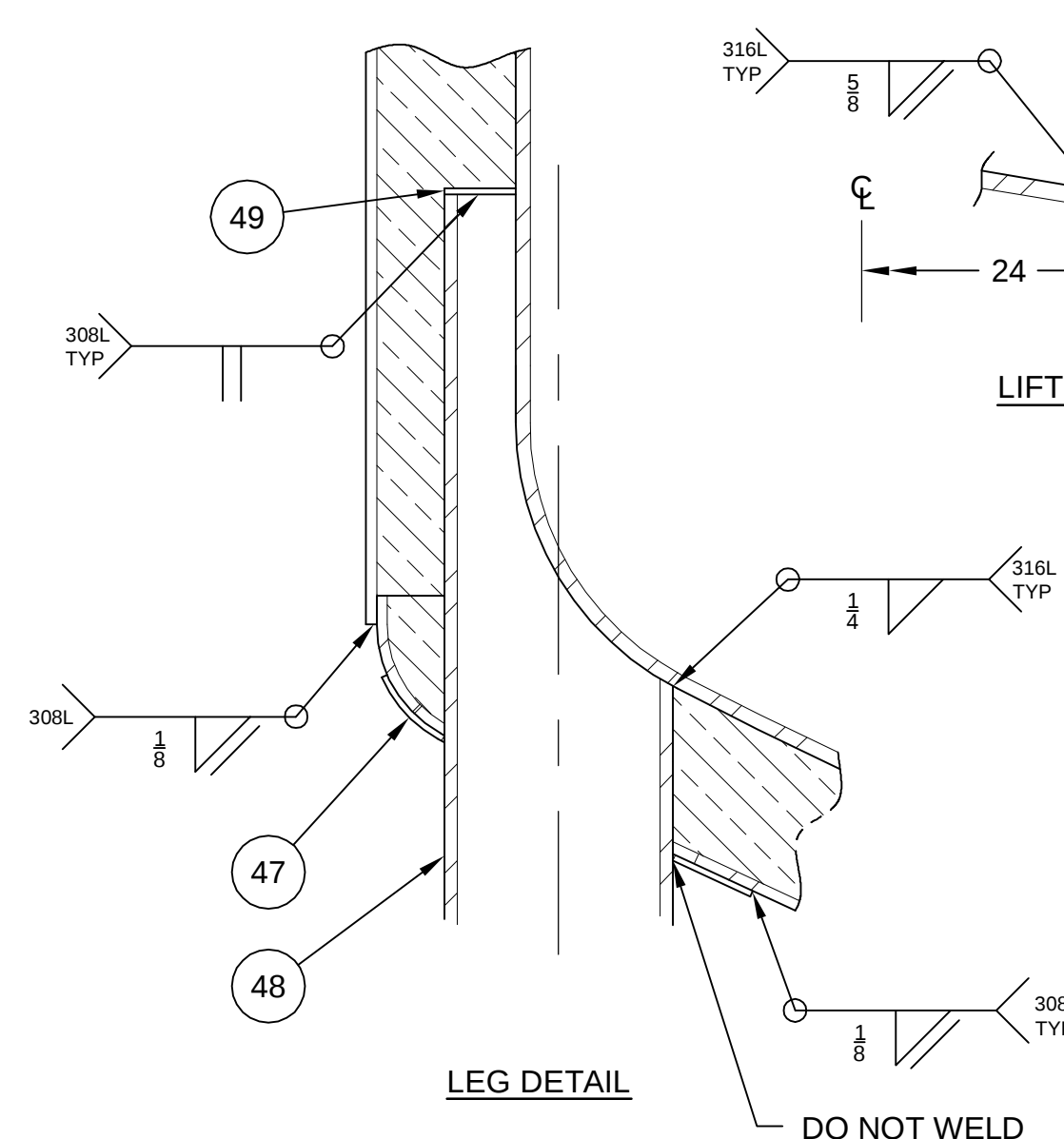
SIDEWALL JACKET NOZZLE DETAIL



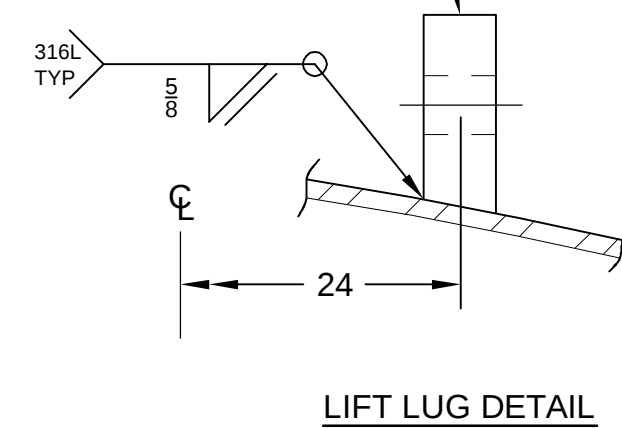
VENT DETAIL



MANWAY DETAIL

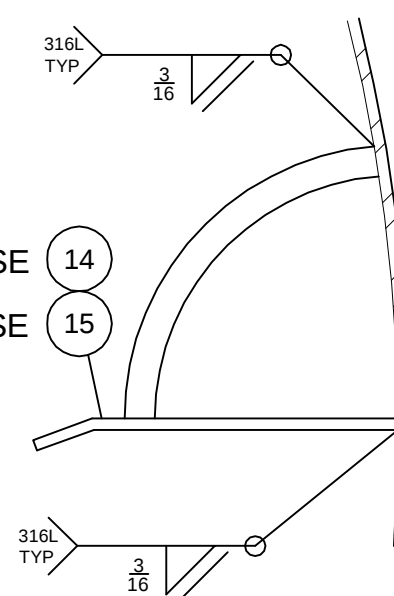


LEG DETAIL



LIFT LUG DETAIL

60" LG UPPER COURSE
(2) 96" LG UPPER COURSE



BAFFLE DETAIL

dcj[®] This drawing complies with Sect. VIII, Div.1 of the ASME Code

ENG. _____
Q.C. _____
A.I. Acceptance _____

Mill Cuts and Weld Documentation Required

TITLE 15,000 GALLON FERMENTER			
DCI ORDER NO.: CS21544		QTY. REQD.: 1	
This drawing is the property of DCI, Inc. and is transmitted in confidence. The reproduction, use, or disclosure, in whole or part, of the design contained herein is prohibited without the written consent of DCI, Inc.			
DIMENSIONS ARE IN INCHES UNLESS SPECIFIED			
 ST. CLOUD, MN SHEET 2 OF 2	SCALE:	DO NOT SCALE DRAWING	
	PRODUCTION VAD	APPROVAL	PROJ. ENG. LAB
	DATE 2/5/08	DATE	PROJ. MAN. VFP
	PREFIX	DRAWING NO.	REV
	014-04	JS3975	F

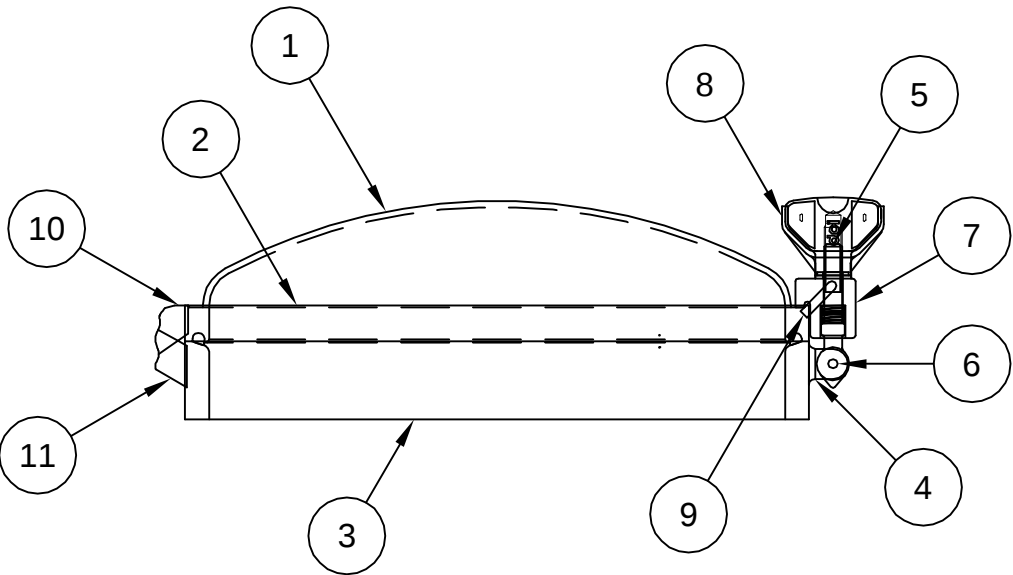
WPS

LEGEND

WELDERS STAMP

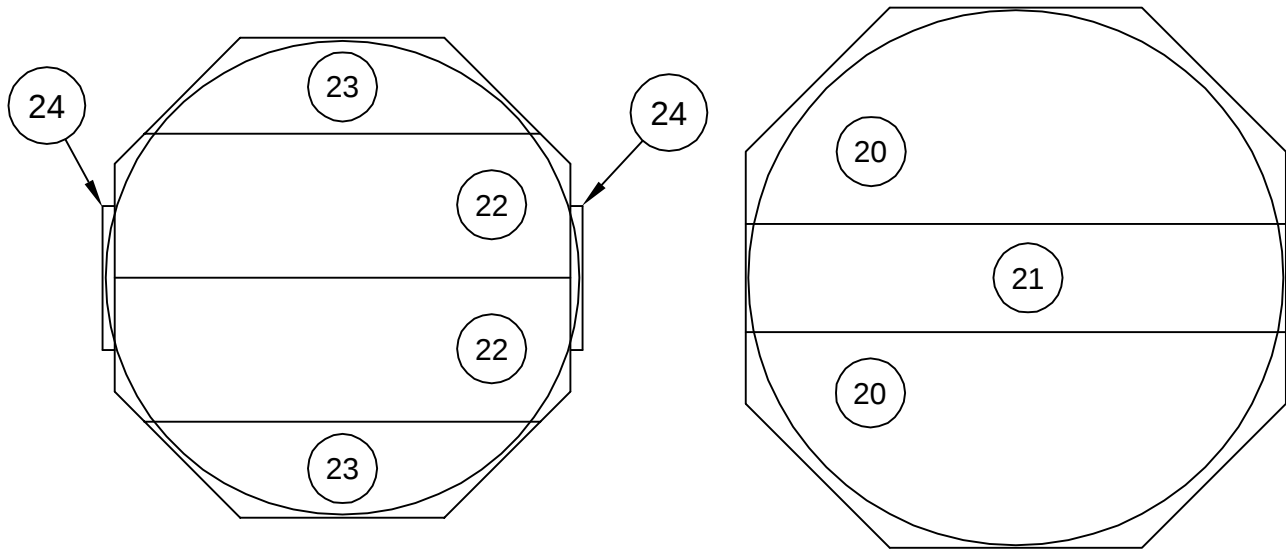
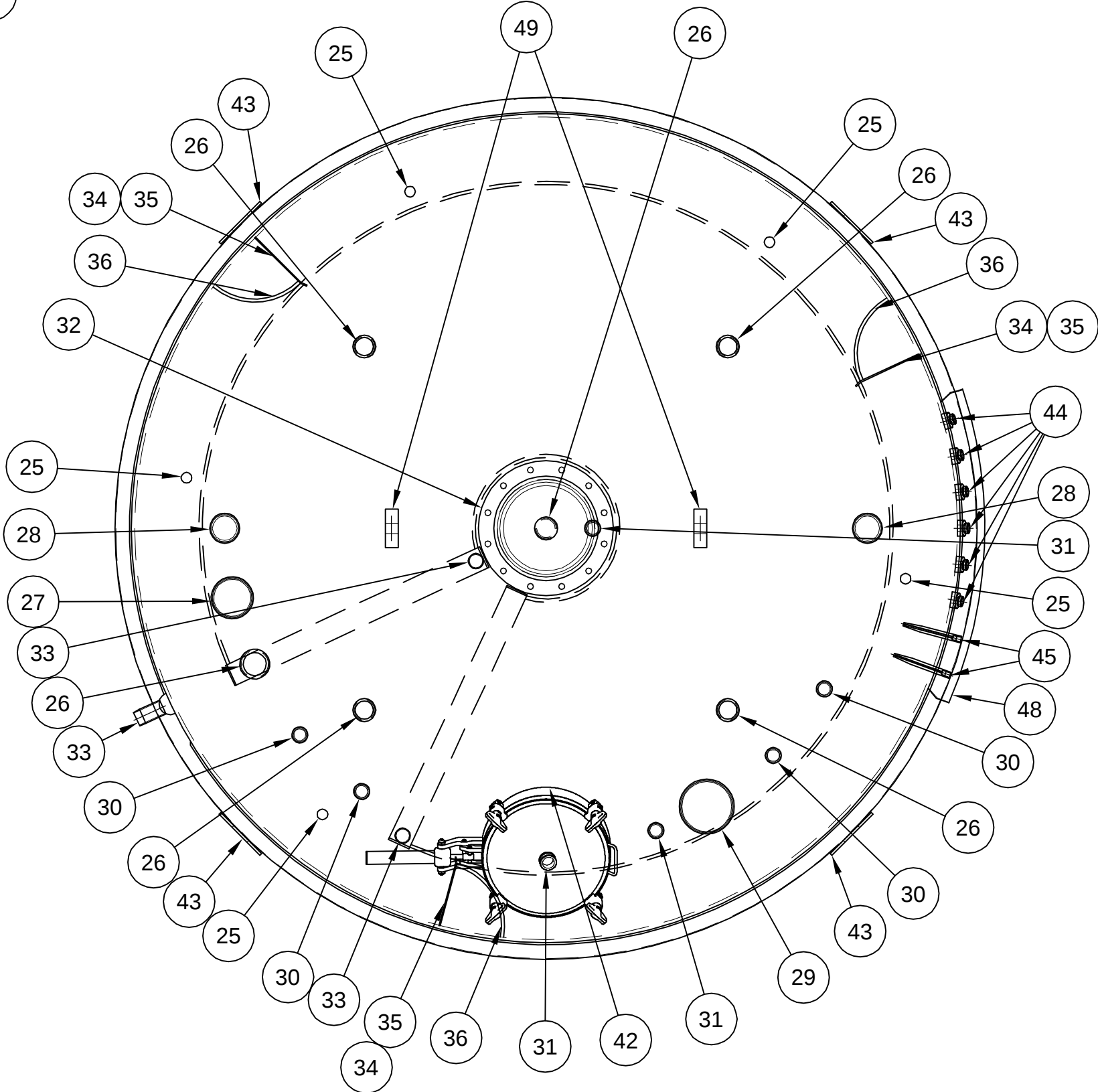
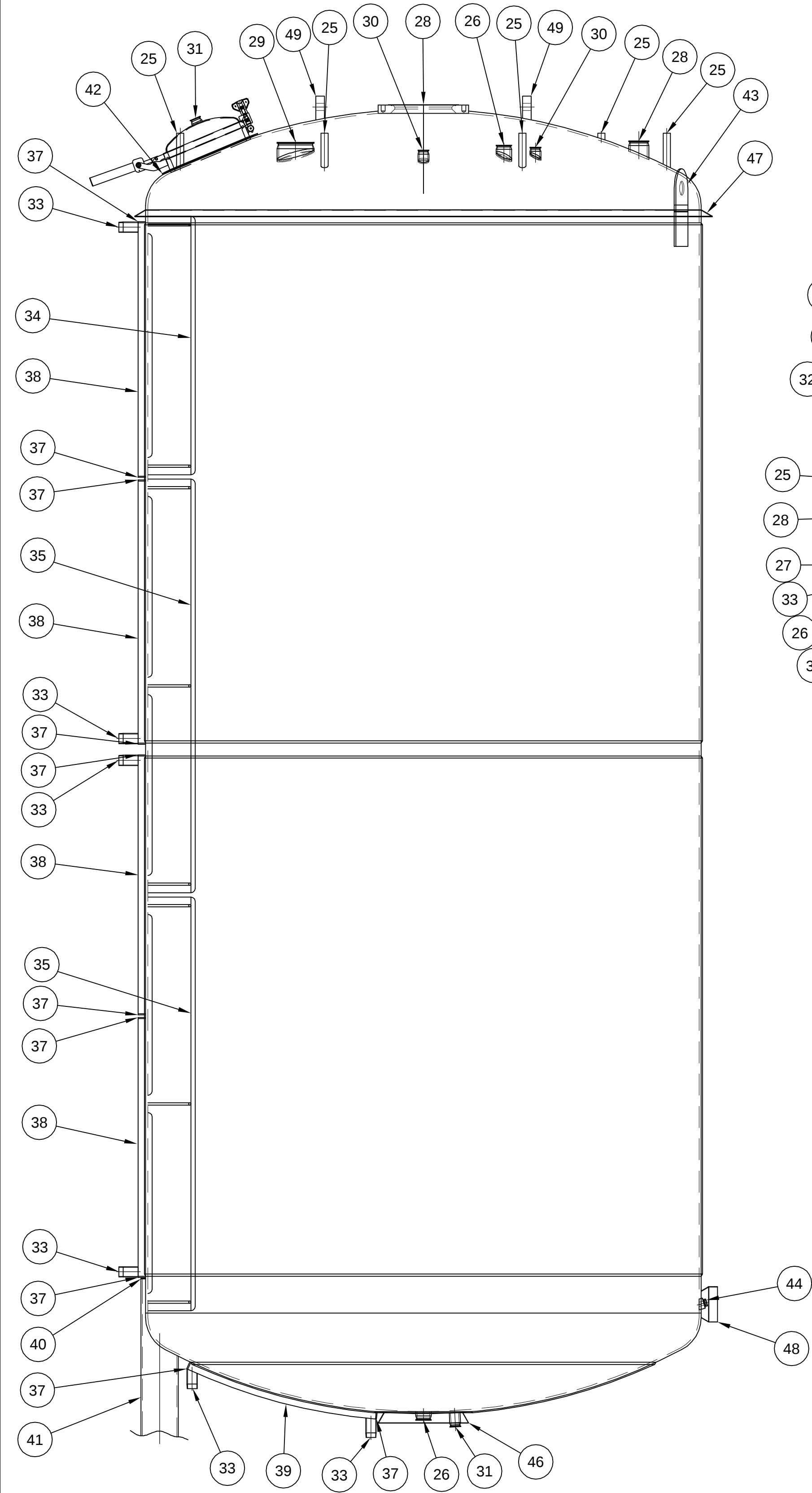
1501

WELD WIRE HEAT NUMBERS		
PRODUCT CONTACT (WIRE TYPE)	HEAT TRANSFER (WIRE TYPE)	OTHER (WIRE TYPE)
RECORD ALL WELDS IN SKETCH		
SPECIAL NOTES (PRODUCT CONTACT)		
☐ GTAW ONLY		
☐ GTAW ONLY 99.996 ARGON		
☒ NO STICK WELDING (SMAW)		
☐ NO PLASMA WELDING (PAW)		
☐ NO GMAW WELDING (GMAW-P ALLOWED)		
☐ NO GMAW-P WELDING		
☐ NO AUTOGENOUS WELDING		
☐ OTHER		
☒ RECORD WELD WIRE HEAT NOS.		
☐ NO CO2 GAS ALLOWED		



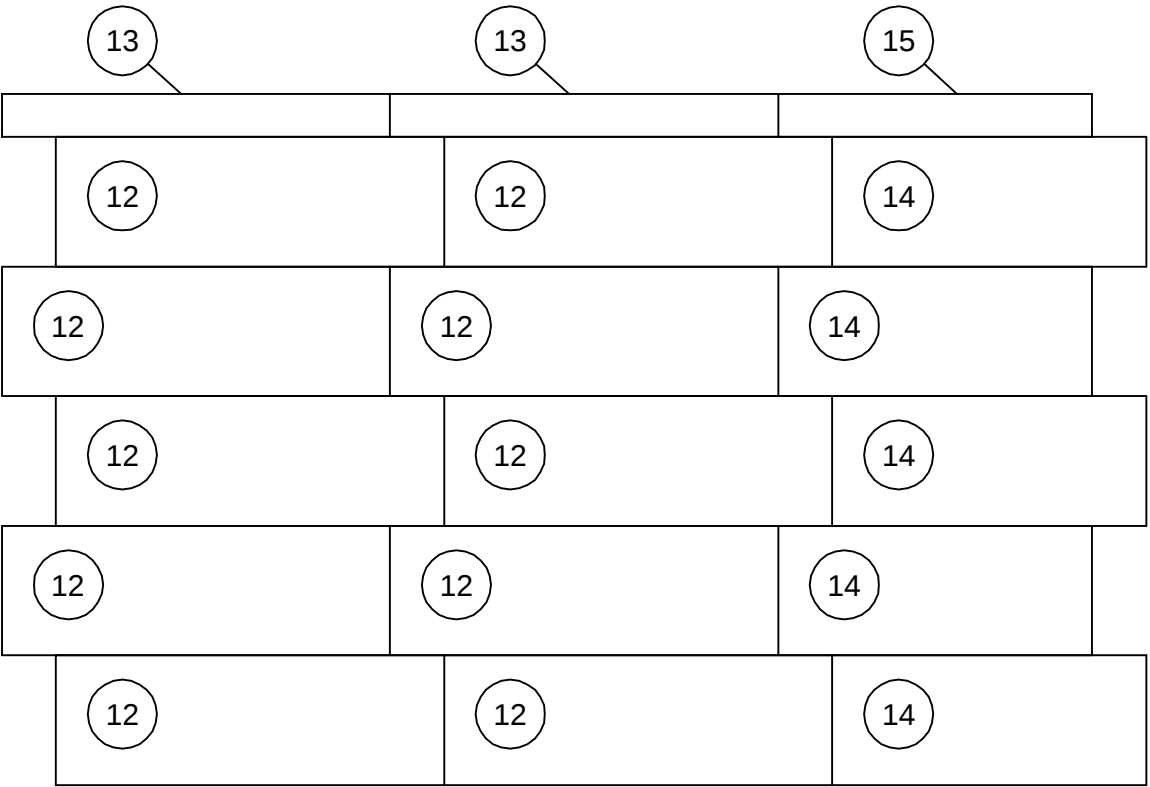
17		17
16	18	16
16	18	16
	19	

DIMPLE JACKET SIDEWALL, QNTY 2, DWG 220135



TOP HEAD DWG 220142

DIMPLE JACKET BTM HD, DWG 220136



LINER,FLAT/FLAT, DWG 220132

CUSTOMER DOCUMENTATION "IN ADDITION TO NOTE: DCI TO PERFORM THE FOLLOWING TESTS & PROCEDURES ON THE FRONT PAGE"

☒ CERTIFIED DRAWING(S)

☒ QC FINAL INSPECTION SHEET

☐ ASME DATA & PARTIAL DATA REPORT(S) (IF ASME)

☐ ASME TRAVELER (AS-BUILT SKETCH) (IF ASME)

☐ ASME NAMEPLATE RUBBINGS (IF ASME)

☐ CALCULATIONS (NOT PE CERTIFIED UNLESS NOTED) (IF ASME)

☐ ASME REQUIRED PRESSURE PART ONLY☐ HEAT TRANSFER CALCULATIONS

☐ SEISMIC CALCULATIONS FOR LEGS OR LUGS☐ JACKET PRESSURE DROP CALCULATIONS

☐ OTHER (SPECIFY)☐ OTHER (SPECIFY)

☒ PURCHASED COMPONENT INSTRUCTION MANUALS, PARTS LISTING

☐ WELDING PROCEDURE SPECIFICATIONS (WPS) QW-482

☐ WELD PROCEDURE QUALIFICATION REPORT (PQR) QW-483

☐ WELDER PERFORMANCE QUALIFICATION (WPQ) QW-484

☐ DCI QUALITY CONTROL MANUAL

☐ OTHER (SEE X-7076)

☐ OTHER☐ OTHER☐ OTHER☐ OTHER☐ OTHER☐ OTHER

*PROPRIETARY-REVIEW AT DCI ONLY OR P&C AGREEMENT

*PROPRIETARY-REVIEW AT DCI ONLY OR P&C AGREEMENT

*PROPRIETARY-REVIEW AT DCI ONLY OR P&C AGREEMENT

*PROPRIETARY-REVIEW AT DCI ONLY OR P&C AGREEMENT

ENG. _____

Q.C. _____

A.I. Acceptance _____

dcicorp

This drawing complies with Sect. VIII, Div.1 of the ASME Code

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Mill Certs and Weld Documentation Required

TRAVELER, CHECK LIST

SHEET 1 OF 1

DRAWN VAD

CHECKED

Q.C. DWG REVIEW

A.I. DWG REVIEW

DATE 2/25/08

DATE

AS BUILT SKETCH

SERIAL NO.- JS3975

N.B. NO.-

FINAL ASSY- JS3975

REV. F

dcicorp

ITEM NO.	NO. REQD	MATL SPEC	DESCRIPTION	HEAT NO.	P.O. NO.	SUPPLIER	Q.C.
1	1	SA240,316/316L	PLATE 1/4(COVER)				
2	1	SA182F,316/316L	RING 24 ID X 26 OD				
3	1	SA182F,316/316L	RING 24 ID X 26 OD				
4	4	SA351,CF8M	CASTING 143988				
5	4	SA193,88	FORGED SCREW 143989				
6	4	SA564,630	ROUND 3/8				
7	4	SA351,CF8M	CASTING 143987				
8	4	SA351,CF10S-MnN	CASTING 203470				
9	1	SA479,316/316L	ROUND 3/8				
10	1	SA351,CF8	CASTING 177123				
11	1	SA351,CF8	CASTING 177124				
12	10	SA240,316/316L	PLATE 1/2 (LINER)				
13	2	SA240,316/316L	PLATE 1/2 (LINER)				
14	5	SA240,316/316L	PLATE 1/2 (LINER)				
15	1	SA240,316/316L	PLATE 1/2 (LINER)				
16	4	SA240,S32101	SHEET 16 GA (DIMPLE JKT)				
17	2	SA240,S32101	SHEET 16 GA (DIMPLE JKT)				
18	2	SA240,S32101	SHEET 16 GA (DIMPLE JKT)				
19	1	SA240,S32101	SHEET 16 GA (DIMPLE JKT)				
20	2	SA240,S32101	SHEET 16 GA (BTM DIMPLE JKT)				
21	1	SA240,S32101	SHEET 16 GA (BTM DIMPLE JKT)				
22	2	SA240,316/316L	PLATE 3/8 (HEAD)				
23	2	SA240,316/316L	PLATE 3/8 (HEAD)				
24	2	SA240,316/316L	PLATE 3/8 (HEAD)				
25	5	SA312,304	PIPE 1-1/4 SCH 10				
26	6	SA479,316L	FERRULE 3 TC (CIP MNT, OUTLET,INLET)				
27	1	SA479,316L	FERRULE 6 TC (RUPTURE DISK)				
28	2	SA479/316L	FERRULE 4 TC (VENT,VAC RELIEF)				
29	1	SA479/316L	FERRULE 8 TC (RUPTURE DISK)				
30	4	SA479/316L	FERRULE 2 TC (INLET)				
31	3	SA479/316L	FERRULE 2 TC (SIGHT GL, LT GL, PRESS TRANS)				
32	1	SA240,316/316L	DISK 2 X 21 DIA (RUPTURE DISK)				
33	4	SA312	PIPE 2-1/2 SCH 40 NPT				
34	3	SA240,316L	SHEET 7 GA				
35	6	SA240,316L	SHEET 7 GA				
36	24	SA479,316/316L	ROUND 1/2				
37	12	SA240,316/316L	PLATE 1/4 (END CAPS)				
38	4	SA240,316/316L	PIPE HALF 3 SCH 40 (SIDE HEADERS)				
39	2	SA240,316/316L	PIPE HALF 3 SCH 40 (BTM HEADERS)				
40	6	SA240,316/316L	SHEET 10 GA (LEG CAPS)				
41	6	SA312,304	PIPE 8 SCH 40 (LEGS)				
42	1	SA240,316/316L	PLATE 1/4 (MANWAY REPAD)				
43	4	SA240,316/316L	PLATE 3/8 (LIFT LUGS)				
44	6	SA479,316/316L	ROUND 1 1/4 (INGOLD)				
45	2	SA479,316/316L	ROUND 1 1/4 (THERMOWELL)				
46	1	SA240,304	SHEET 12 GA (TAPER)				
47	1	SA240,304	SHEET 10 GA (BREASTRING)				
48	1	SA240,304	SHEET 10 GA (TAPER)				
49	2	SA240,316/316L	PLATE 2"				
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INSPECTION STEPS

DCI JOB No.

Q.C.DATE

A.I.DATE

1.) Inspect Welded Seams of shell,heads,dimple jacket

2.) Bottom Head fit up & tack,weld prep

3.) Bottom Head welding appearance Nozzles & girth seam

4.) Top Head fit up & tack,weld prep

5.) Top Head welding appearance Nozzles & girth seam

6.) Nozzles, attachments, Manway weld prep & layout

7.) Shell Nozzles, attachments, Manway welding appearance

8.)* Dimple Jacket Weld Macro-Section Results Satisfactory

9.) Non Destructive Examination (if required)

10.)* Internal Visual inspection

11.) Preliminary Pressure Test

12.)* Final Pressure Test

13.)* Final visual & Dimensional inspection

14.)* Stamping

15.)* Calculation & Mill Test Report Review

16.)* Sign Data Report

17.) Non-Conformance (if applicable)

* Indicates inspection points required by Authorized Inspector.

Form No. X6088-2