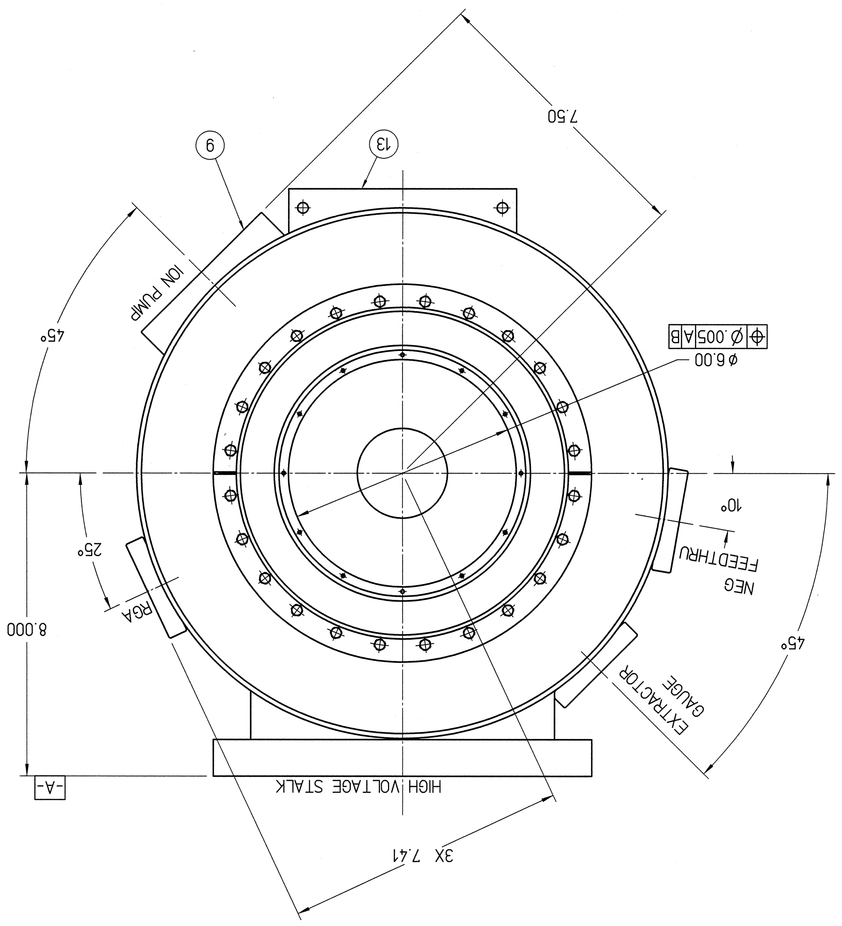
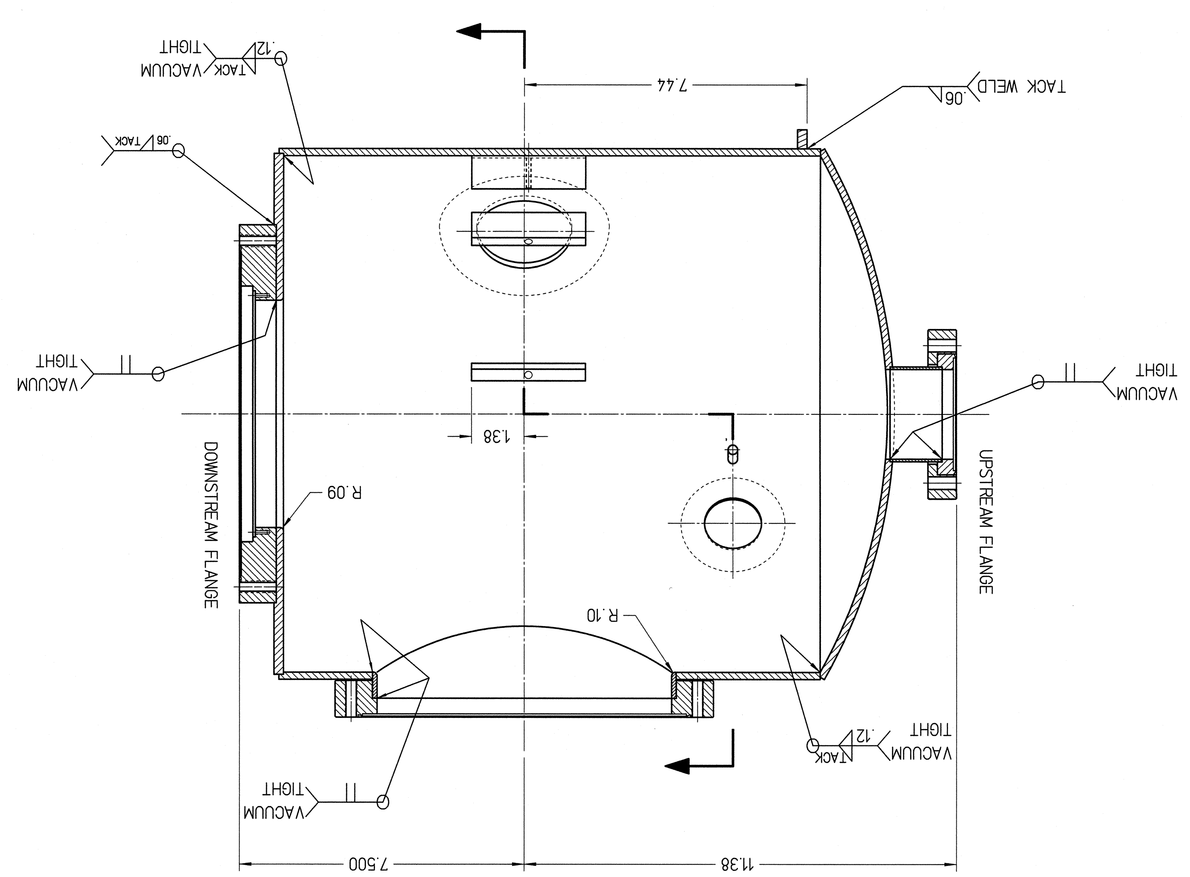
NOTES:

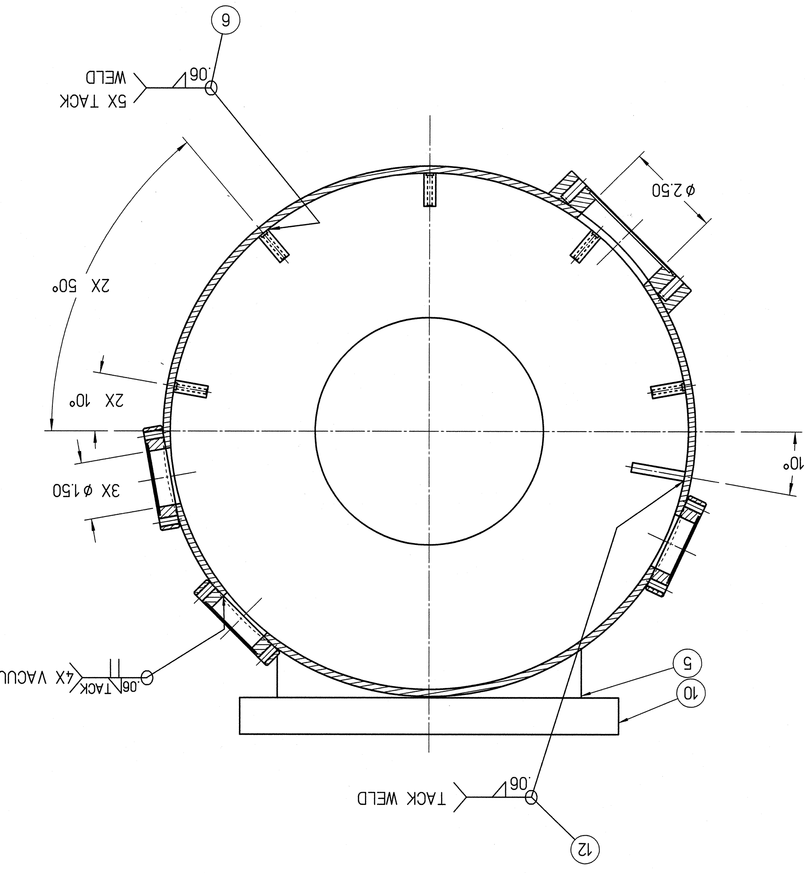
1. USE THE FOLLOWING JLAB SPECIFICATIONS
   FABRICATION OF ULTRA HIGH VACUUM EQUIPMENT: #22631-S-001
   CLEANING AND HANDLING OF U.H.V. COMPONENTS: #22632-S-001
   WELDING SPECIFICATION FOR U.H.V. COMPONENTS: #22633-S-001
   HELIUM LEAK TEST FOR U.H.V. COMPONENTS: #22634-S-001
   CEBAF QA SPECIFICATION ---------- #91790-200
   STAINLESS STEEL FLANGES FOR UHV APPLICATIONS #23661-S-001
2. ALL TOLERANCES APPLY AFTER WELDING.
3. SKIM CUT 63 FINISH INSIDE DIAMETER OF 14.00 TUBE (ITEM 1) PRIOR TO WELDING ON TUBES.
4. SKIM CUT 63 FINISH INSIDE SURFACE OF HEAD (ITEM 2) AND .25 THICK PLATE (ITEM 4) PRIOR TO WELDING.
5. PART NUMBER TO BE ENGRAVED OR ETCHED IN LOCATIONS SHOWN USING MINIMUM .25 HIGH CHARACTERS.
6. PROTECT FLANGE FACES DURING AND AFTER PROCESSING WITH SUITABLE PLASTIC CAPS. DAMAGE TO KNIFE EDGES IS UNACCEPTABLE.
7. ESTIMATED WEIGHT - 80 LBS
8. SUGGESTED FABRICATION SEQUENCE:
   A. WELD TUBES, BLOCKS, ROD & LUG (ITEMS 2-6,12,13) TO TUBE (ITEM 1).
   B. ELECTROPOLISH SUB-ASSEMBLY.
   C. BAKE SUB-ASSEMBLY FOR 3 HOURS AT 900°C IN A VACUUM FURNACE
   PUMPED DOWN TO LESS THAN 3 X 10 E-6 TORR THEN FURNACE COOL.
   D. MACHINE .25 THICK PLATE (ITEM 4) TO SUIT LOCATION AND ORIENTATION OF DOWNSTREAM FLANGE (ITEM 11) RELATIVE TO 10 INCH FLANGE (ITEM 10).
   E. WELD FLANGES (ITEMS 7-11) TO SUB-ASSEMBLY.
9. CLEAN AND HIGH PRESSURE RINSE CHAMBER - BY JLAB.
10. BAKE CHAMBER FOR 7-14 DAYS AT 400°C IN A VACUUM FURNACE PUMPED DOWN TO LESS THAN 3 X 10 E-6 TORR THEN FURNACE COOL - BY JLAB.
11. NEG COAT CHAMBER INTERIOR - BY JLAB.

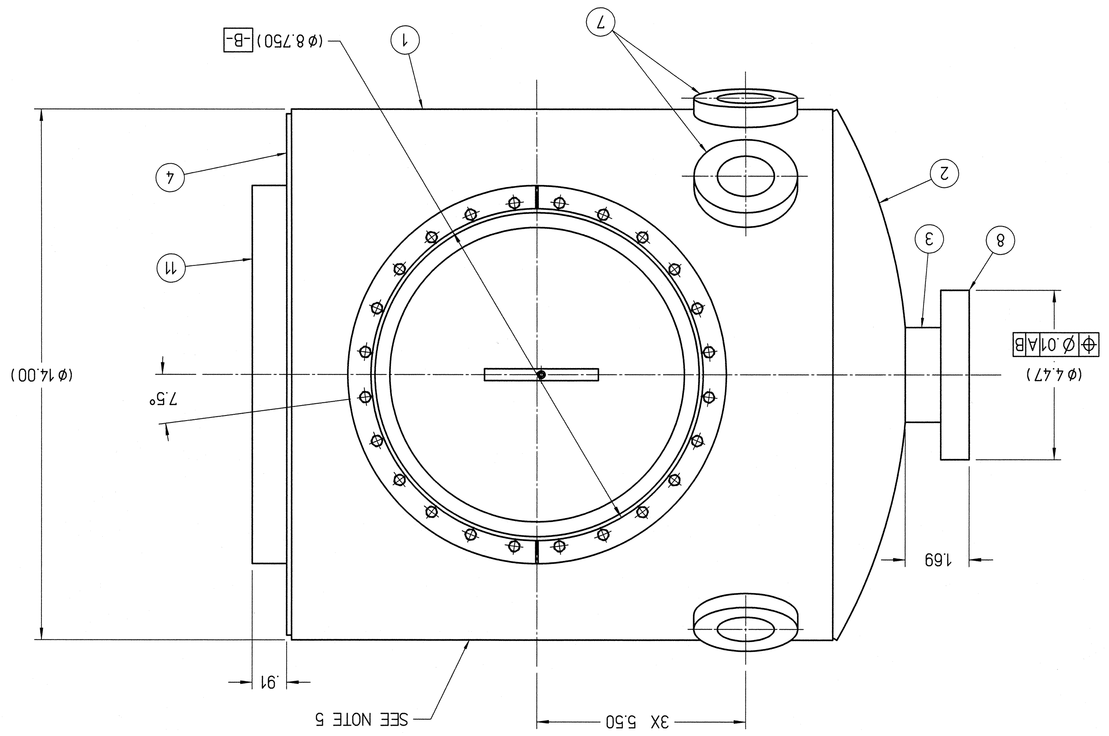
ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
1	5		8.00 O.D. TUBE X .120 WALL	STAINLESS STEEL TYPE 316L	
5	6	ACC-200-3000-0302	HV. CHAMBER NEG BLOCK		
3	7	KURT J. LESKER CO F0275N100TLN	FLANGE, 2.75 O.D., NON-ROTATABLE, TAPPED CF, BORE 150 DIA THRU	STAINLESS STEEL TYPE 316LN	
1	8	KURT J. LESKER CO F0450N250RLN	FLANGE, 4.50 O.D., ROTATABLE, CF X 2.50 NOM I.D.	STAINLESS STEEL TYPE 316LN	
1	9	SPECIAL FLANGE	FLANGE, 4.50 O.D., NON-ROTATABLE, TAPPED CF, BORE 2.50 DIA THRU	STAINLESS STEEL TYPE 316LN	
1	10	KURT J. LESKER CO F1000N8000TLN	FLANGE, 10.00 O.D., NON-ROTATABLE, TAPPED CF, X 8.00 NOM I.D.	STAINLESS STEEL TYPE 316LN	
1	11	ACC-200-3000-0303	HV. CHAMBER DOWNSTREAM FLANGE		
1	12		.25 DIAMETER ROD X 14 LG.	STAINLESS STEEL TYPE 316L	
1	13	ACC-200-3000-0304	HV. CHAMBER LUG	STAINLESS STEEL TYPE 316L	

PARTS LIST (CONTINUED)









ITEM NO.	QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
1	1		ROLL, VACUUM SEAM WELD & REROLL 14.00 O.D. X .188 WALL TUBE.	STAINLESS STEEL TYPE 316L	
1	2		DISHED HEAD, .188 WALL	STAINLESS STEEL TYPE 316L	
1	3		2.50 O.D. TUBE X .065 WALL X 13? LG	STAINLESS STEEL TYPE 316L	
1	4		.25 THICK PLATE	STAINLESS STEEL TYPE 316L	

PARTS LIST

EACH SHEET OF A MULTI-SHEET DRAWING SHALL ALWAYS CARRY THE SAME REVISION LEVEL

DIM. & TOL. PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
FRACTIONS ± 1/64 DECIMAL .XX ± .01 .XXX ± .005 ANGLES ± .50°
TOLERANCES ARE:

TRACKING NO. N/A

	APPROVALS	DATE
DRAWN	D MACKIE	8/6/08
CHECKED	Kevin Wells	1/14/09
APPROVED	Dave Gassner	1/14/09
APPROVED	Kevin Wells	1/14/09

THIRD ANGLE PROJECTION

AS NOTED

MATERIAL

DOCUMENT CONTROL STAMP

UNLESS OTHERWISE NOTED: FINISH MACHINED 63 ✓ SURFACES GEBAR B, BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

Jefferson lab
U.S. Department of Energy
Office of Science
Operated by Jefferson Science Associates, LLC
Thomas Jefferson National Accelerator Facility

ACC INJECTOR LOAD LOCK GUN HIGH VOLTAGE CHAMBER

SIZE	DWG. NO.	REV
E	ACC-200-3000-0301	-

SCALE 1:2 USED ON ASSY NO. ACC-200-3000-0300 SHEET 1 OF 1

M610