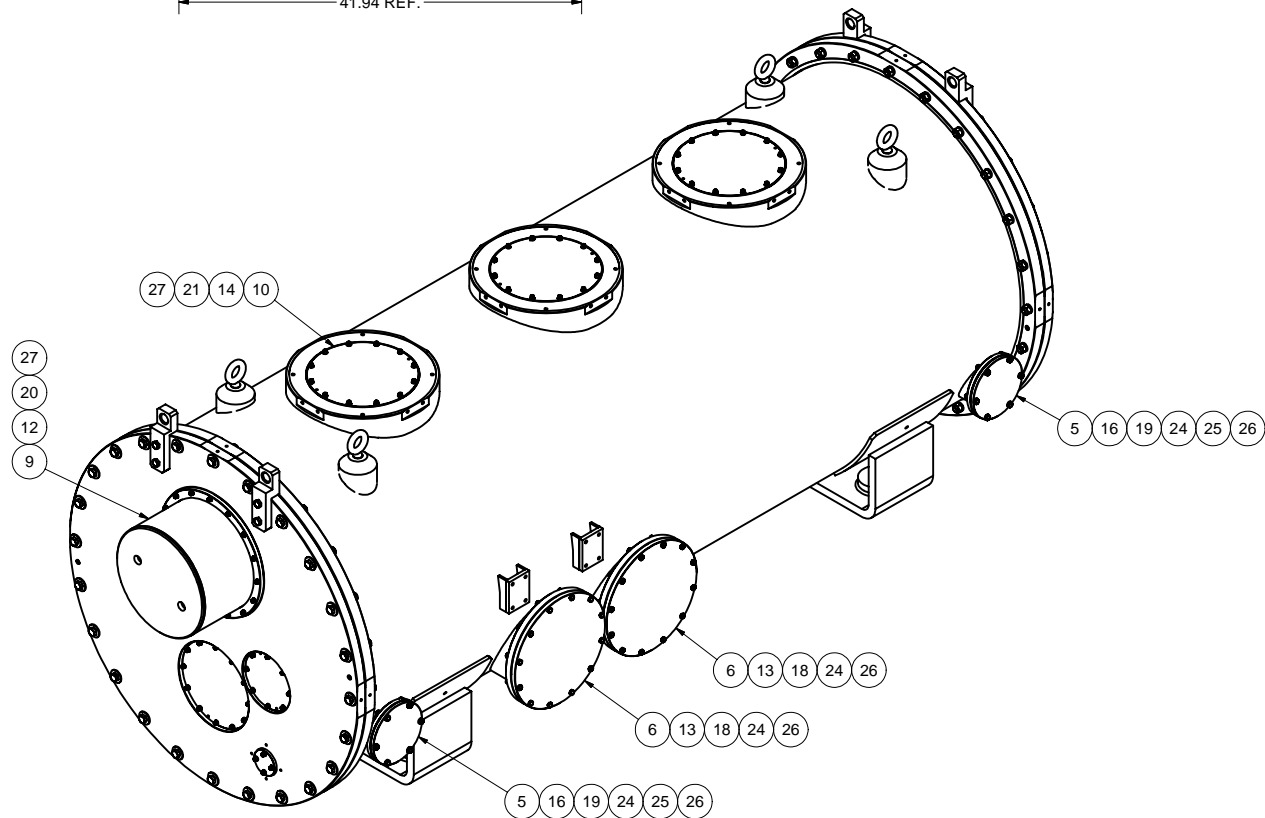
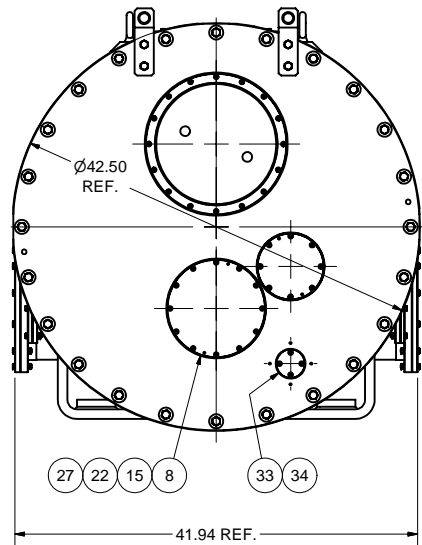
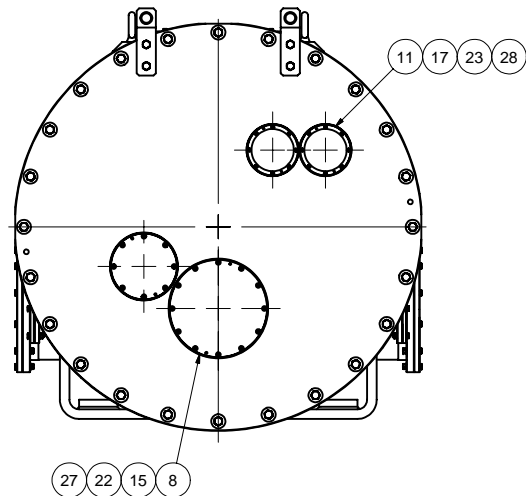
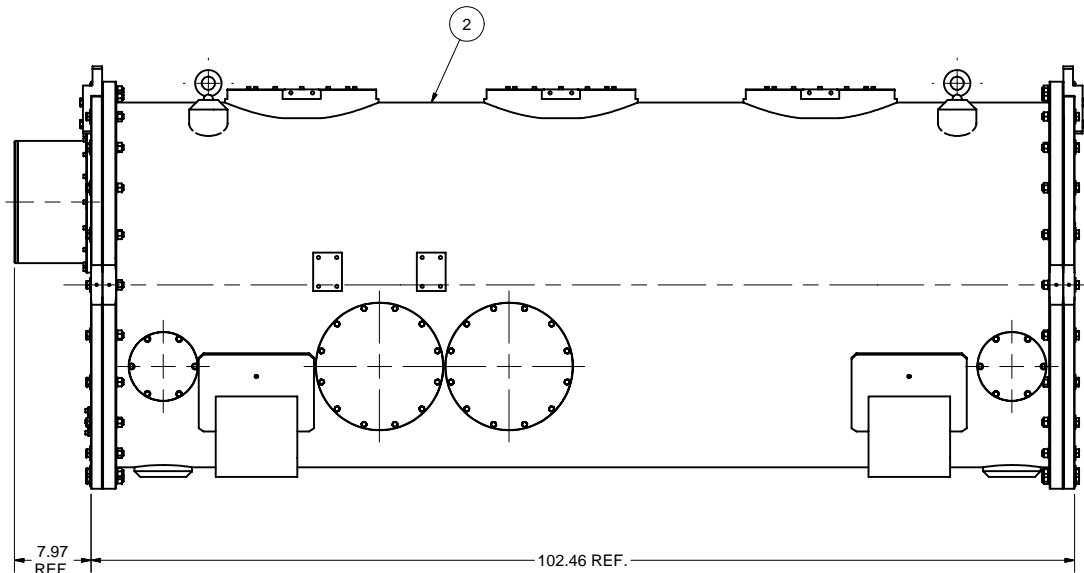
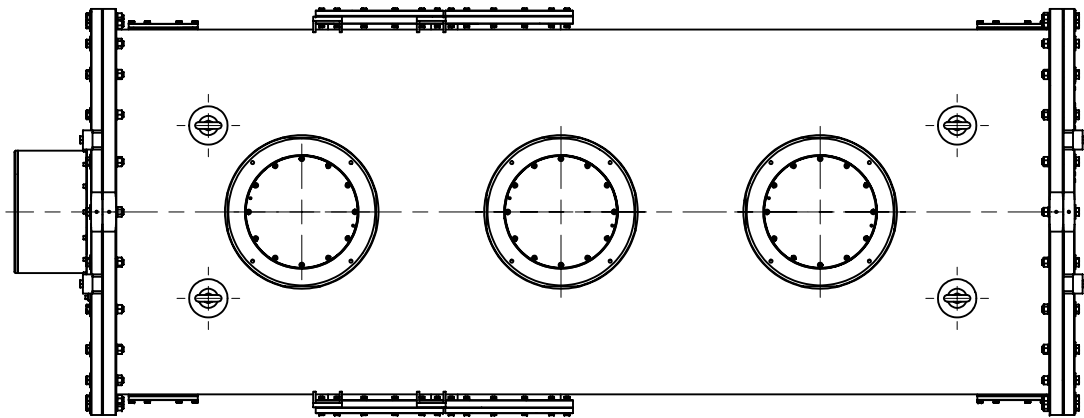





REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	C8	PARTS ITEM 33 AND 34 ADDED.	9/26/06	VM
B		NEW REVISION (A) OF ITEM 2 SHOWN. ITEM 7 REMOVED. QTY OF ITEMS 6, 13, 15, 18, 19, 24, 26 CHANGED.	10/11/06	VM



1 VACUUM VESSEL LEAK CHECK ASM

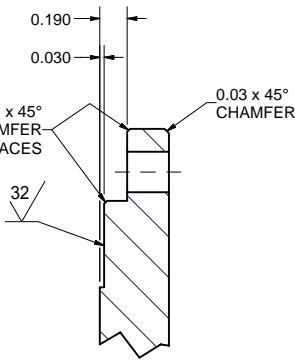
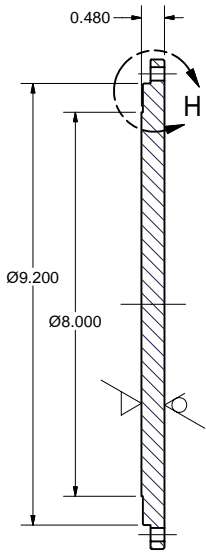
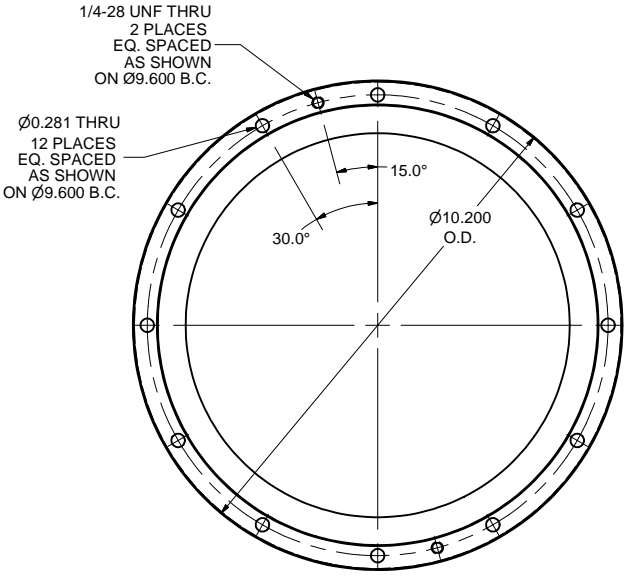
FILE NAME: 7110-018
SHEET NO.: 1
DFT. SCALE: 1:10
MATERIAL: AS NOTED
QTY: 1 REQ'D.
NOTES: 1. MODIFY ONE OF SMALL BLANKS (ITEM 5) FOR PUMP OUT AND LEAK CHECK.
LEAK RATE: < 2.0E-8 TORR-L/SEC.

34	-	1.5 ID x 1/8 W (#222) O-RING	1			Viton or EPDM	
33	7110-018 (Sh. 3)	WPM WEIGHT FIXING BLANK	1				
28	-	#10 Spring Lock Washer	16				
27	-	1/4 Spring Lock Washer	96				
26	-	5/16 Spring Lock Washer	72				
25	-	5/16 Washer	24				
24	-	5/16-24 Hex Nut	72				
23	-	10-32 x 5/8 Socket Head Cap Screw	16				
22	-	1/4-28 x 5/8 Socket Head Cap Screw	40				
21	-	1/4-28 x 3/4 Socket Head Cap Screw	40				
20	-	1/4-28 x 1 Socket Head Cap Screw	16				
19	-	5/16-24 x 1-1/2 Hex Cap Screw	24				
18	-	5/16-24 x 1-3/4 Hex Cap Screw	48				
17	-	4.0 ID x 1/8 W (#242) O-RING	2			Viton or EPDM	
16	-	5.5 ID x 3/16 W (#357) O-RING	4			Viton or EPDM	
15	-	8.5 ID x 3/16 W (#371) O-RING	2			Viton or EPDM	
14	-	10.0 ID x 3/16 W (#377) O-RING	3			Viton or EPDM	
13	-	11.0 ID x 3/16 W (#379) O-RING	4			Viton or EPDM	
12	-	13.0 ID x 3/16 W (#382) O-RING	1			Viton or EPDM	
11	7110-018 (Sh. 3)	2 K WIRE TUBE BLANK	2				
10	7110-018 (Sh. 3)	TOP PORT BLANK	3				
9	7110-018 (Sh. 4)	CRYOLINE PORT COVER SUBASM	1				
8	7110-018 (Sh. 2)	BEAM LINE PORT BLANK	2				
6	7110-018 (Sh. 2)	INPUT COUPLER PORT BLANK	4				
5	7110-018 (Sh. 2)	GATE VALVE PORT BLANK	4				
2	7110-030	HORIZ. TEST VAC. VESSEL ASM	1				
1	7110-018 (Sh. 1)	VAC. VESSEL LEAK CHECK ASM	1				

				ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
				QUANTITY									
D	PRINT DISTR.	PLOT DATE: 2/6/2008 CAD FILE NAME: 7110-018.idw											
7110-018 SH. NO. 1 OF 4	REV. B	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>ERL Horizontal Test Cryomodule Vacuum Vessel Leak Check Assembly</div>									
		CHECKED BY: VM APPROVED BY: ML		DRAWN BY VM	DRAWN FOR M. Liepe	DATE 8/8/2006	SCALE	D	7110-018 SH. NO. 1 OF 4		REV. B		

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OR EQUIVALENT APPROVED BY CORNELL LEPP

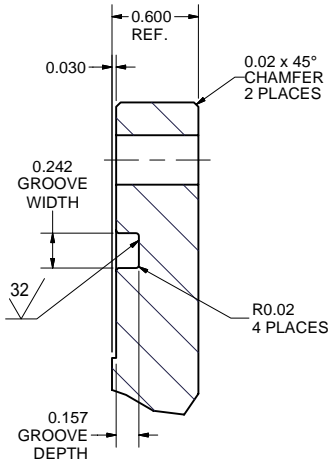
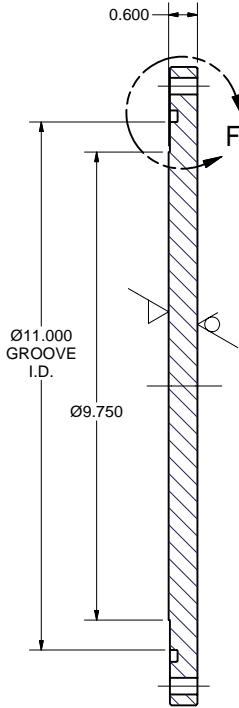
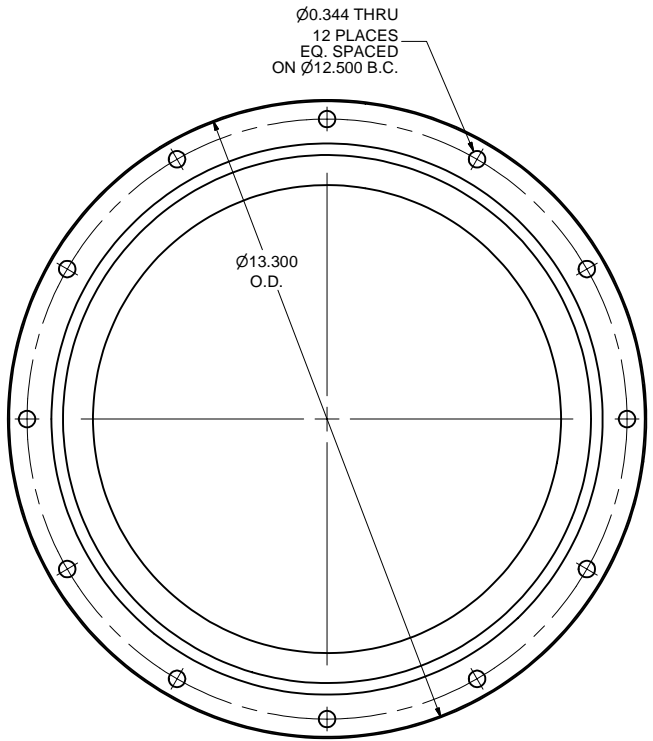
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		TUNER PORT BLANK ITEM 7 REMOVED. QTY OF ITEM 6 CHANGED TO 4 (WAS 2).	10/11/06	VM



DETAIL H
SCALE 1.5: 1

8 BEAM LINE PORT BLANK

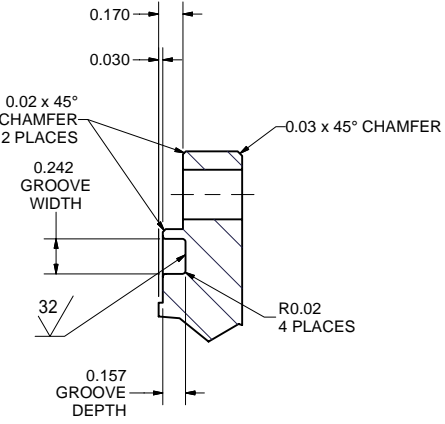
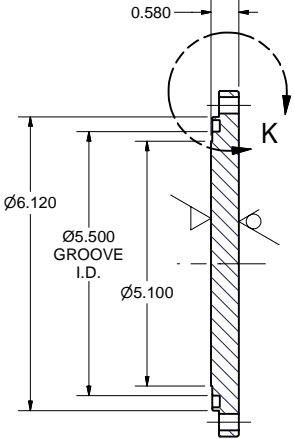
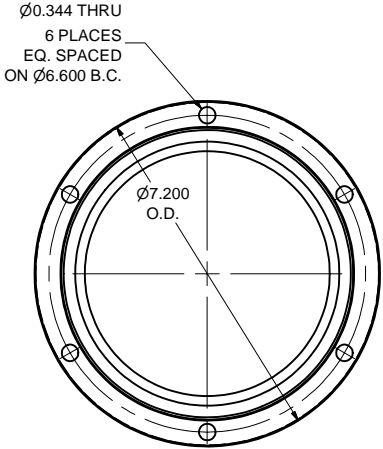
FILE NAME: 7110-018
SHEET NO.: 2
DFT. SCALE: 1:2
MATERIAL: 1/2" 304L STN STL SHEET
QTY: 2 PER ASM
NOTES:



DETAIL F
SCALE 1.5: 1

6 INPUT COUPLER PORT BLANK

FILE NAME: 7110-018
SHEET NO.: 2
DFT. SCALE: 1/2
MATERIAL: 5/8" 304L STN STL SHEET
QTY: 4 PER ASM
NOTES:





DETAIL K
SCALE 1.5: 1

5 GATE VALVE PORT BLANK

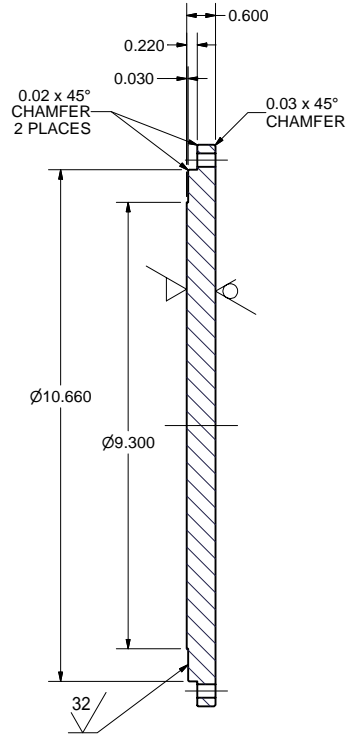
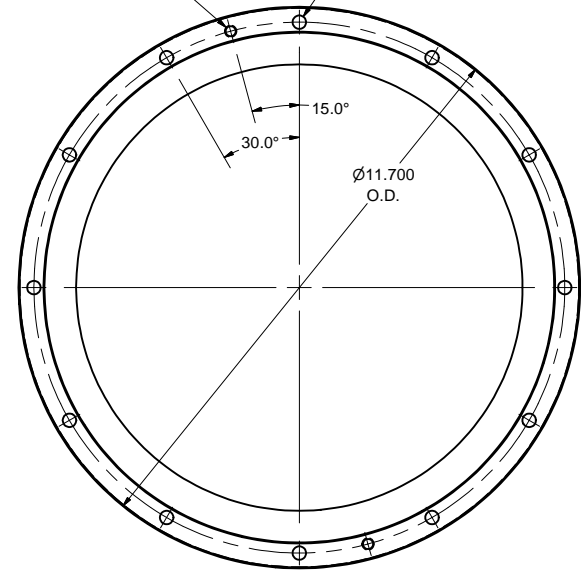
FILE NAME: 7110-018
SHEET NO.: 2
DFT. SCALE: 1:2
MATERIAL: 5/8" 304L STN STL SHEET
QTY: 4 PER ASM
NOTES:

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OR EQUIVALENT APPROVED BY CORNELL LEPP

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.	
								QUANTITY					
D	PRINT DISTR.	PLOT DATE: 2/6/2008 CAD FILE NAME: 7110-018.idw											
7110-018 SH. NO. 2 OF 4		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .000 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853									
		ERL Horizontal Test Cryomodule Flange Blanks - Details											
REV. A		CHECKED BY: VM APPROVED BY: ML		DRAWN BY VM		DRAWN FOR M. Liepe		DATE 8/8/2006		SCALE D		7110-018 SH. NO. 2 OF 4	REV. A

1/4-28 UNF THRU
2 PLACES
EQ. SPACED
ON Ø11.060 B.C.

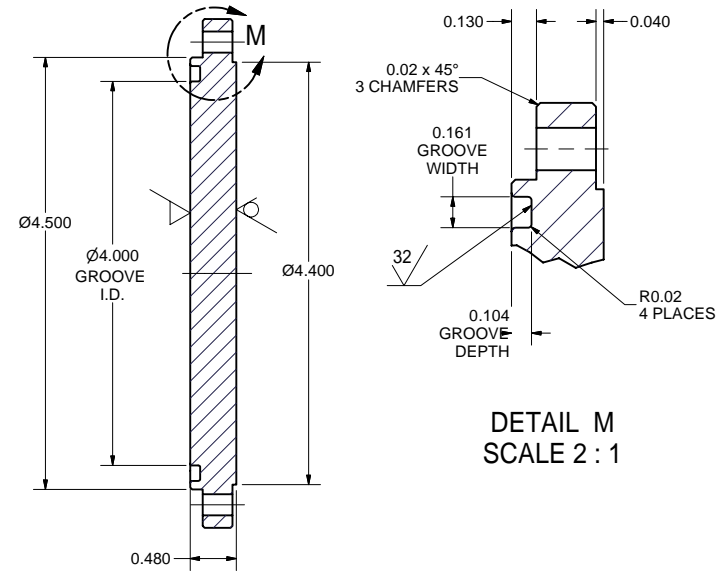
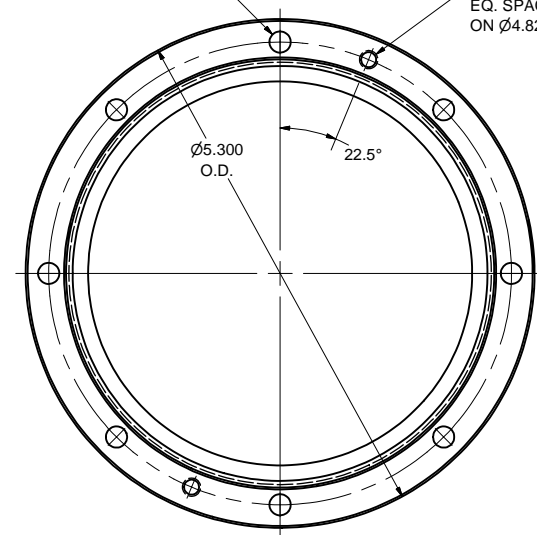
Ø0.281 THRU
12 PLACES
EQ. SPACED
ON Ø11.060 B.C.



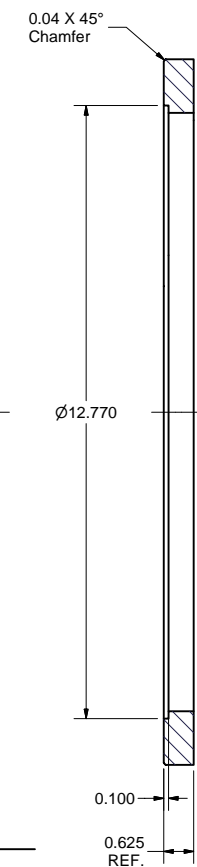
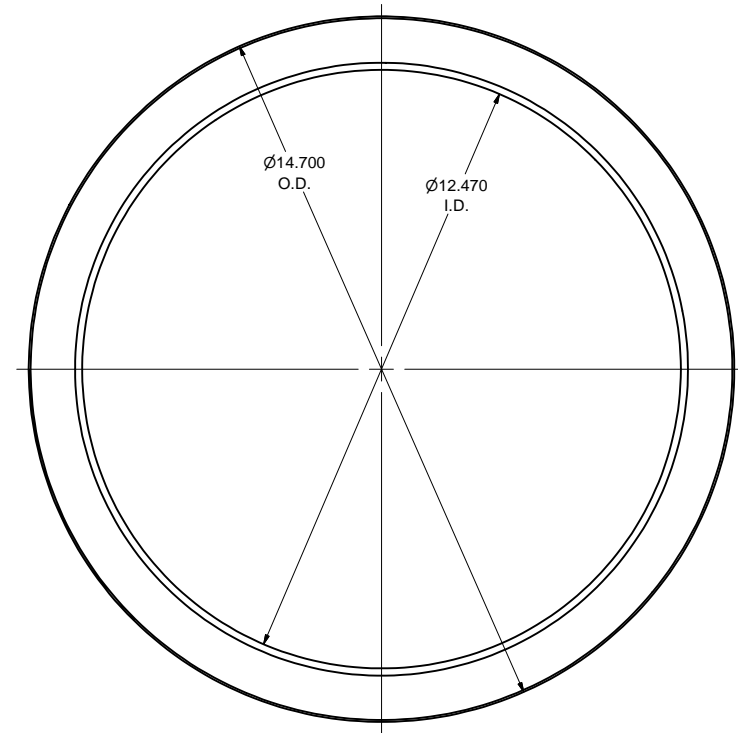
10 TOP PORT BLANK
FILE NAME: 7110-018
SHEET NO.: 3
DFT. SCALE: 1:2
MATERIAL: 5/8" 304L STN STL SHEET
QTY: 3 PER ASM
NOTES:

Ø0.221 THRU
8 PLACES
EQ. SPACED
ON Ø4.820 B.C.

10-32 UNF
2 HOLES
EQ. SPACED
ON Ø4.820 B.C.



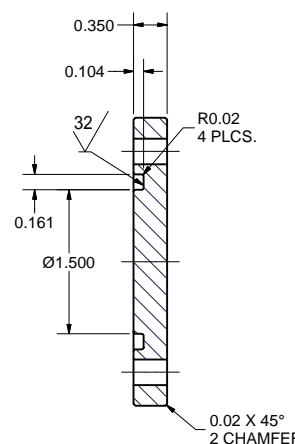
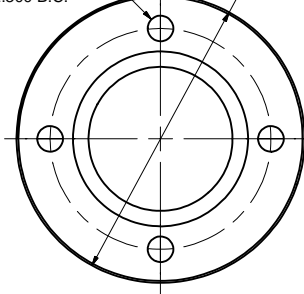
11 2K WIRE TUBE BLANK
FILE NAME: 7110-018
SHEET NO.: 3
DFT. SCALE: 1:1
MATERIAL: 1/2" 304L STN STL SHEET
QTY: 2 PER ASM
NOTES:



30 COVER FLANGE
FILE NAME: 7110-018
SHEET NO.: 3
DFT. SCALE: 1:2
MATERIAL: 5/8" 304L STAINLESS STEEL SHEET
QTY: 1 PER ASM
NOTES:

Ø0.266 THRU
4 HOLES
EQ. SPACED
ON Ø2.300 B.C.

Ø3.000
O.D.

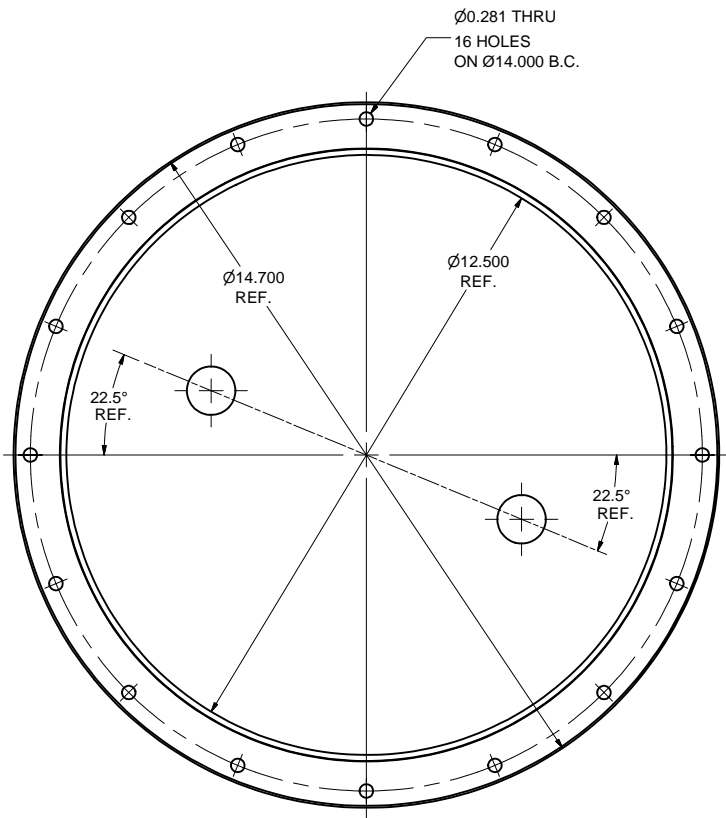


33 WPM WEIGHT FIXING BLANK
FILE NAME: 7110-018
SHEET NO.: 3
DFT. SCALE: 1:1
MATERIAL: 304L ST. STEEL
QTY: 1 PER ASSEMBLY
NOTES:

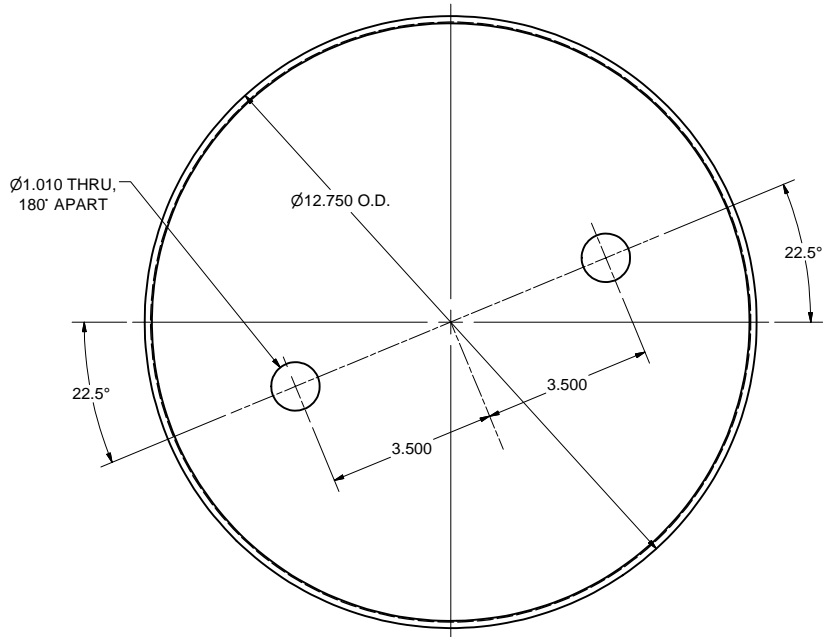
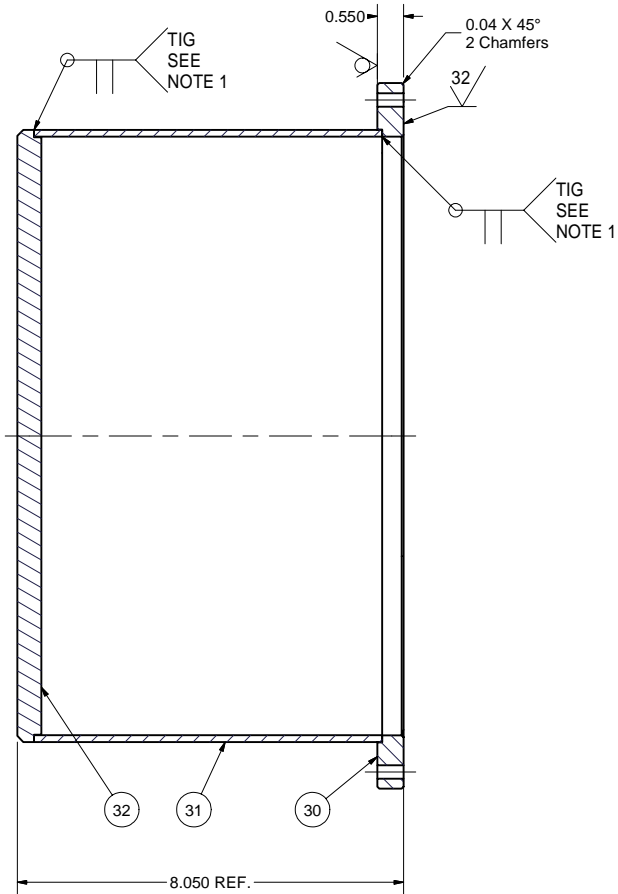
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REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		PART ITEM 33 ADDED.	9/26/06	VM

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
						QUANTITY					
D	PRINT DISTR.	PLOT DATE: 2/6/2008 CAD FILE NAME: 7110-018.idw									
7110-018 SH. NO. 3 OF 4	REV. A	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS			CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
ERL Horizontal Test Cryomodule Cover Flange and Blanks - Details				DRAWN BY VM	DRAWN FOR M. Liepe	DATE 8/8/2006	SCALE	D	7110-018 SH. NO. 3 OF 4	REV. A	

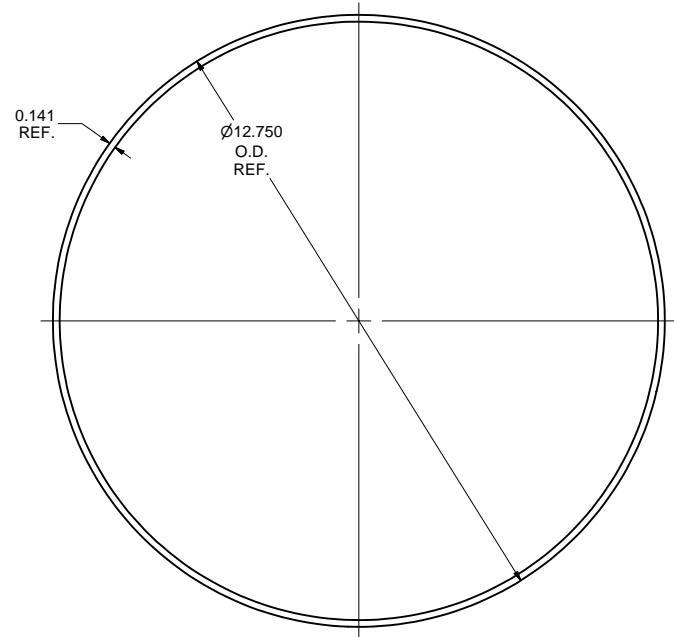


9 CRYOLINE PORT COVER SUBASM
FILE NAME: 7110-018
SHEET NO.: 4
DFT. SCALE: 1:2
MATERIAL:
QTY: 1 PER ASSEMBLY
NOTES: 1. WELDS TO CONFORM TO UHV SPEC.

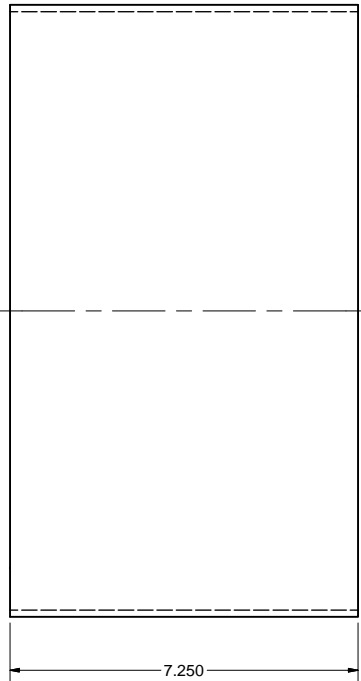


32 COVER DISK
FILE NAME: 7110-018
SHEET NO.: 4
DFT. SCALE: 1:2
MATERIAL: 1/2" 304L STAINLESS STEEL SHEET
QTY: 1 PER ASSEMBLY
NOTES:




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OR EQUIVALENT APPROVED BY CORNELL LEPP



31 COVER TUBE
FILE NAME: 7110-018
SHEET NO.: 4
DFT. SCALE: 1:2
MATERIAL: 12.75 OD x 0.141 W 304L STAINLESS STEEL TUBE
QTY: 1 PER ASSEMBLY
NOTES:



32	7110-018 (Sh. 4)	COVER DISK	1					
31	7110-018 (Sh. 4)	COVER TUBE	1					
30	7110-018 (Sh. 3)	COVER FLANGE	1					
9	7110-018 (Sh. 4)	CRYOLINE PORT COVER SUBASM	X					

 		ITEM		DWG. NO.		DESCRIPTION			G1	G2	G3	REMARKS		REV.
									QUANTITY					
D	PRINT DISTR.	PLOT DATE: 2/6/2008												
		CAD FILE NAME: 7110-018.idw												
7110-018 SH. NO. 4 OF 4		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓				<div><div><div>CORNELL UNIVERSITY</div><div></div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div><div>ERL Horizontal Test Cryomodule Port Cover, Sub-Asm and Details</div></div>								
		CHECKED BY: VM APPROVED BY: ML				DRAWN BY VM		DRAWN FOR M. Liepe		DATE 8/8/2006		SCALE	D	7110-018 SH. NO. 4 OF 4