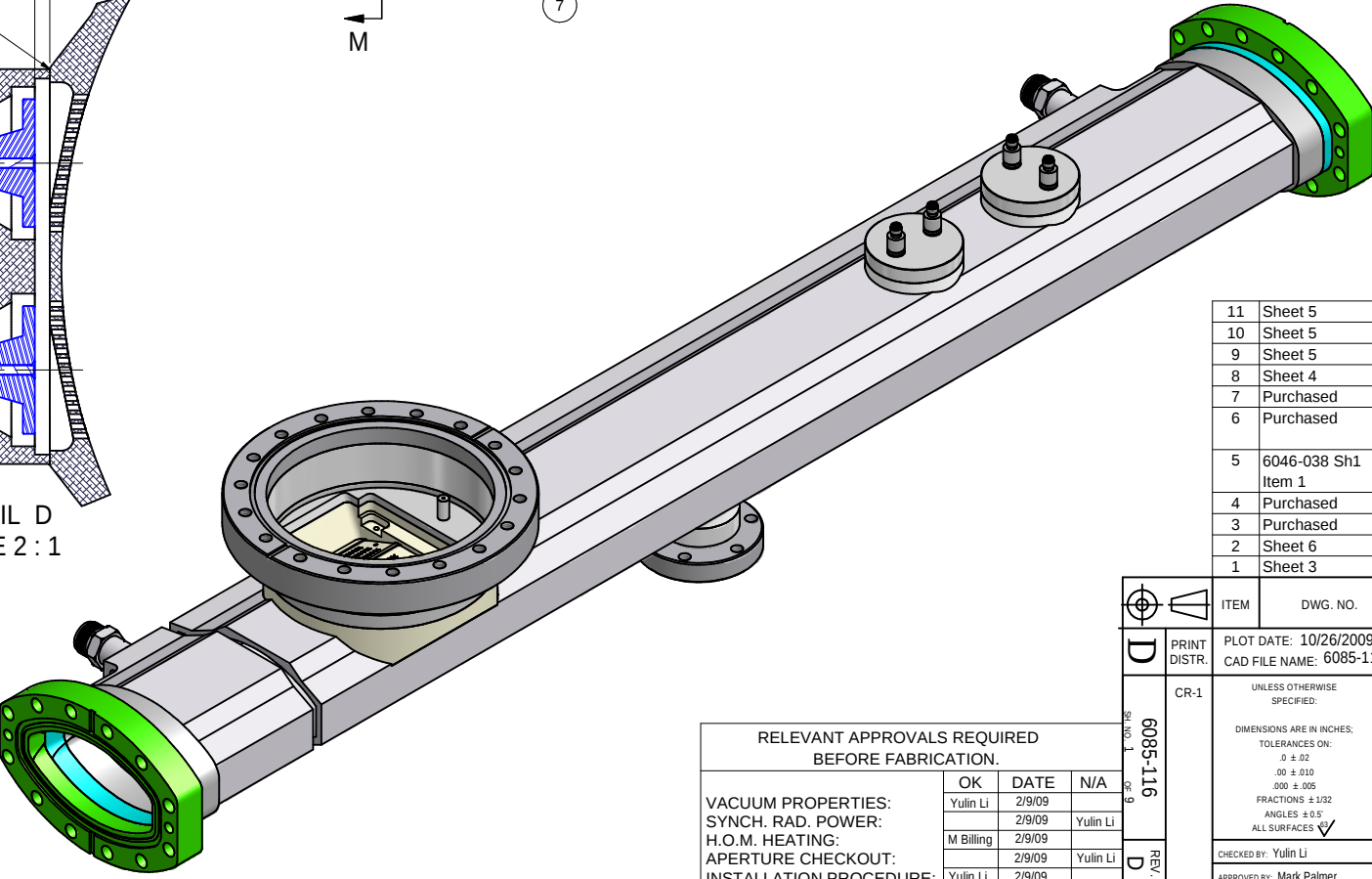
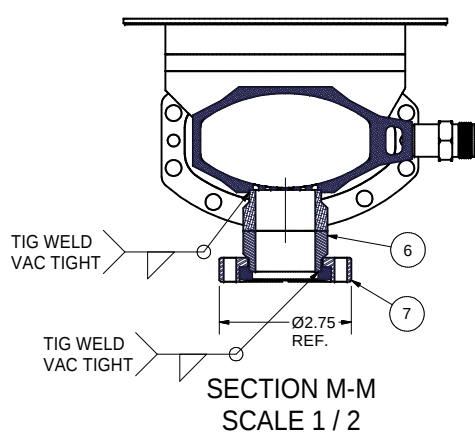
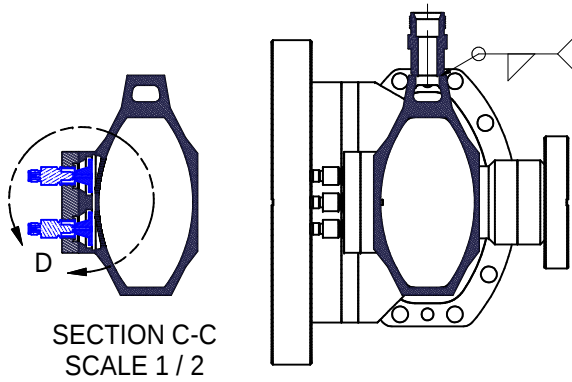
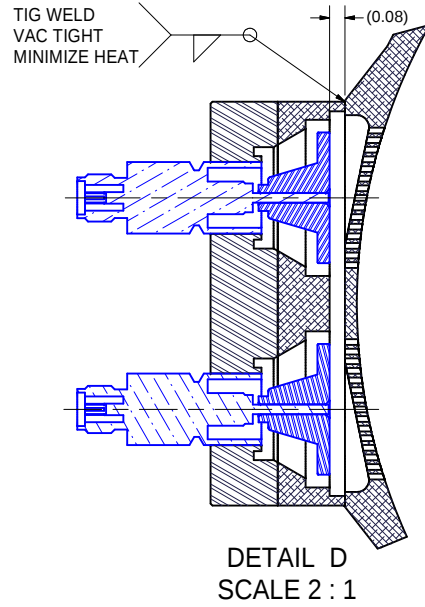
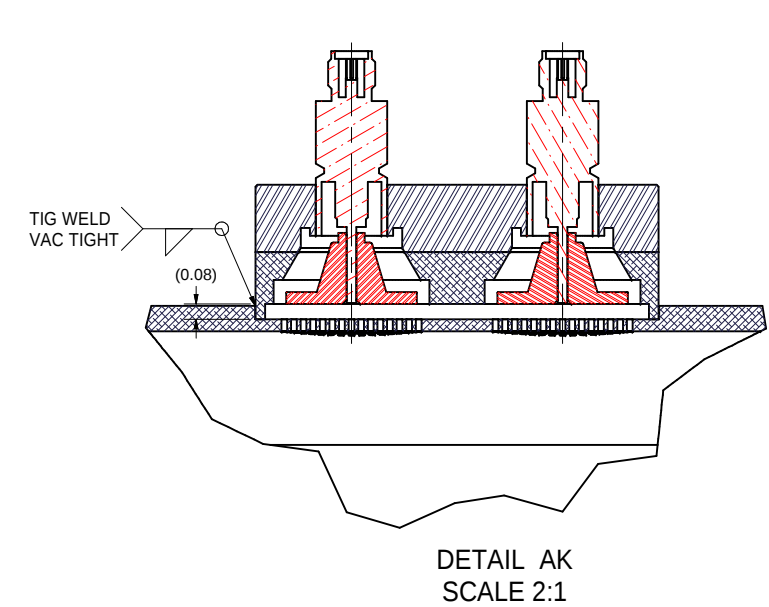
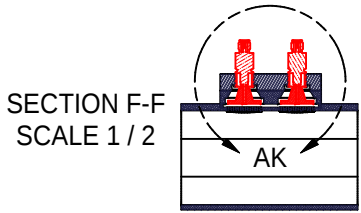
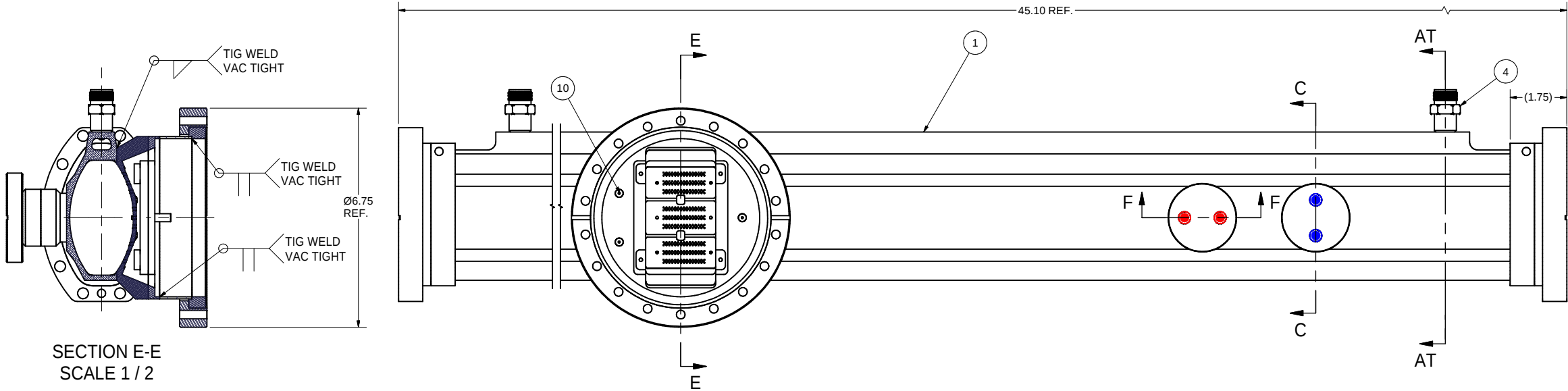


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	B-2	REVISED PART 5 DESCRIPTION IN BOM, TO MAKE IT CLEARER	2/11/09	Y.LI
B	B6	Added fillet at bottom of BPM pocket in item 1.	2/19/09	TIO
C		Added a new part #11	3/13/09	Y.LI
D		Revised welding note at Detail View D	3/16/09	Y.LI



ITEM	DWG. NO.	DESCRIPTION	QTY	REMARKS	REV.
11	Sheet 5	5" RFA Port Extend Tube	1		
10	Sheet 5	1/4" Pin	3		
9	Sheet 5	3/16" Pin	2		
8	Sheet 4	Pickup Button Asm	2		
7	Purchased	F02750150RCE	1		
6	Purchased	Gauge Port SST_Al Tube	1	Thermionics P/N ATS-150 USE Pt 3 & 5 of 6046-038	
5	6046-038 Sh1 Item 1	CESR Oval Flange Asm, MK II	2		
4	Purchased	Alum Water Fitting, 1/2"	2		
3	Purchased	F06750500RT	1		
2	Sheet 6	RFA Housing	1		
1	Sheet 3	CESR Extrusion	1		

RELEVANT APPROVALS REQUIRED BEFORE FABRICATION.			
OK	DATE	N/A	
Yulin Li	2/9/09		
M Billing	2/9/09	Yulin Li	
Yulin Li	2/9/09		

VACUUM PROPERTIES:
SYNCH. RAD. POWER:
H.O.M. HEATING:
APERTURE CHECKOUT:
INSTALLATION PROCEDURE:

PRINT DISTR.

CR-1

6085-116

REV. 1

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES:
TOLERANCES ON:
.0 ± .02
.00 ± .010
FRACTIONS ± 1/32
ANGLES ± 0.5°
ALL SURFACES

CORNELL UNIVERSITY

LEPP

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

CESR Drift Beampipe for Carbon Coating Assembly

CORNELL UNIVERSITY
Floyd R. Newman Laboratory
Ithaca, NY 14853

CHECKED BY: Yulin Li

DRAWN BY: TMK

DRAWN FOR: Y. Li

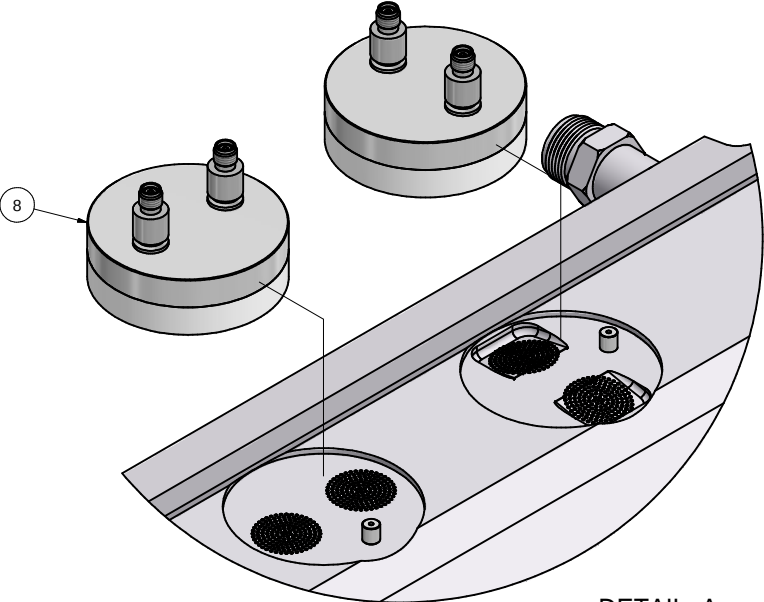
DATE: 1/25/2009

SCALE: D

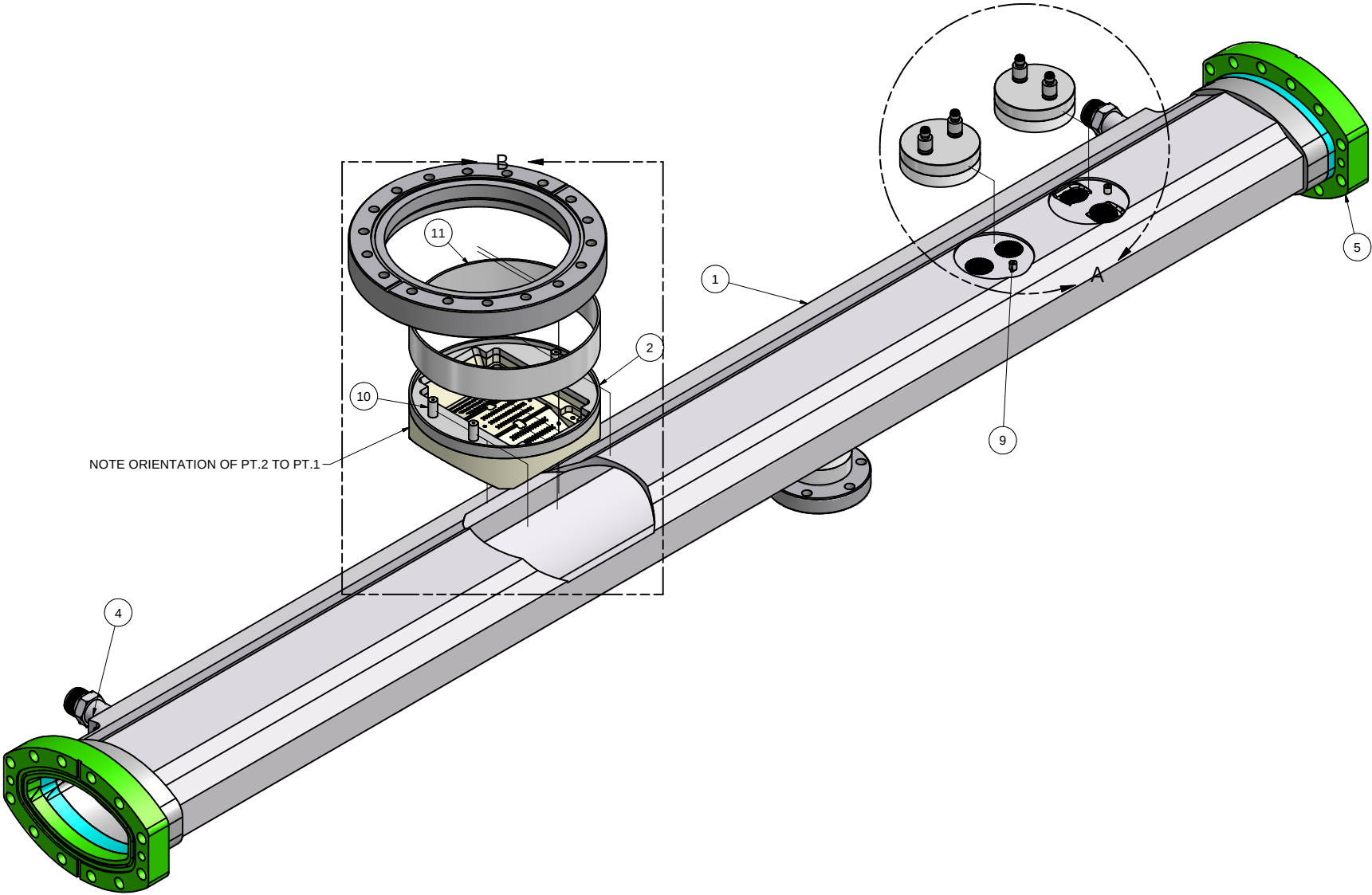
6085-116
SH. NO. 1 OF 9

REV. D

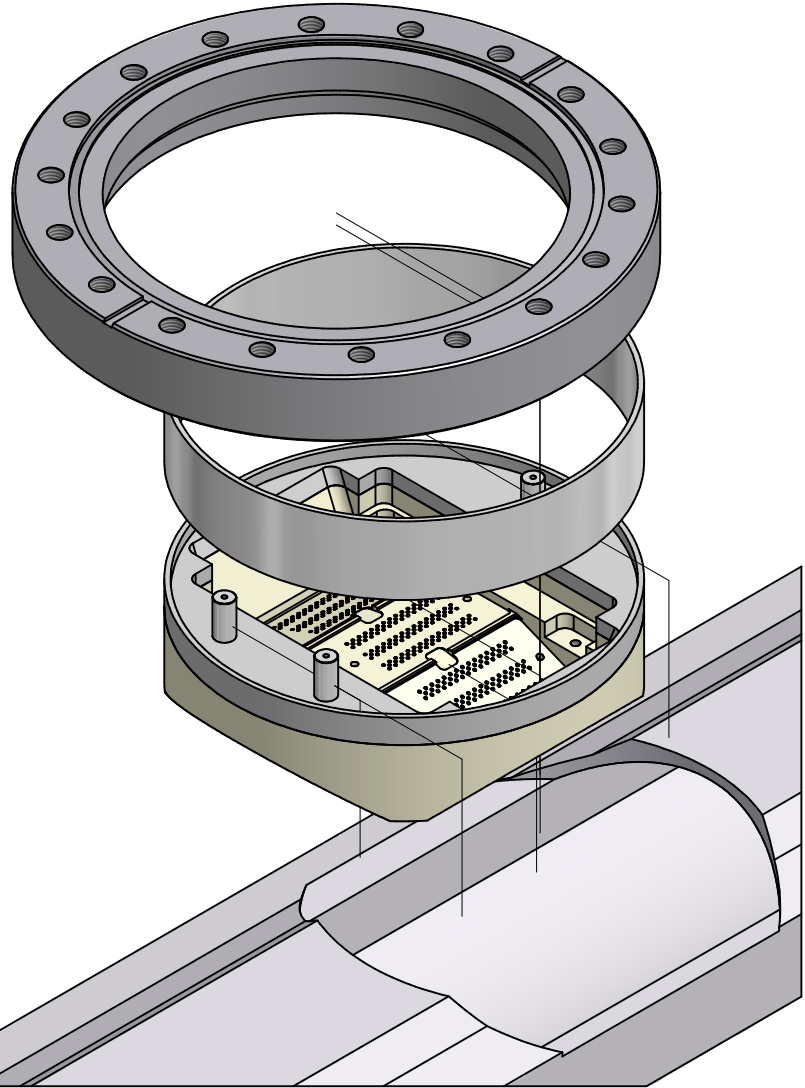
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added a new part #11	3/13/09	Y.LI



DETAIL A
SCALE 1 : 1



NOTE ORIENTATION OF PT.2 TO PT.1

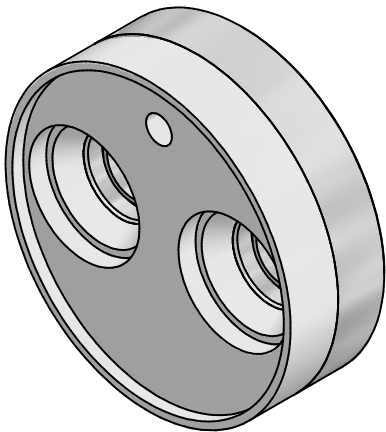
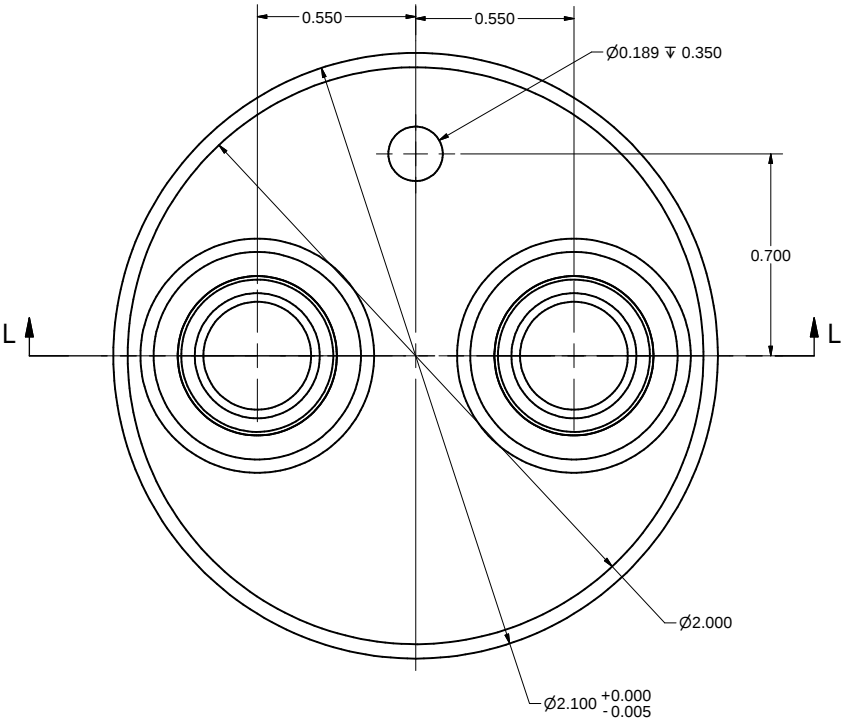


DETAIL B
SCALE 1 : 1

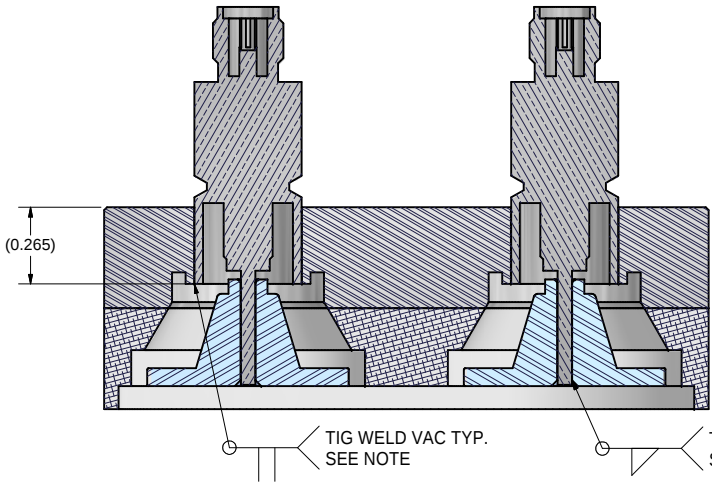
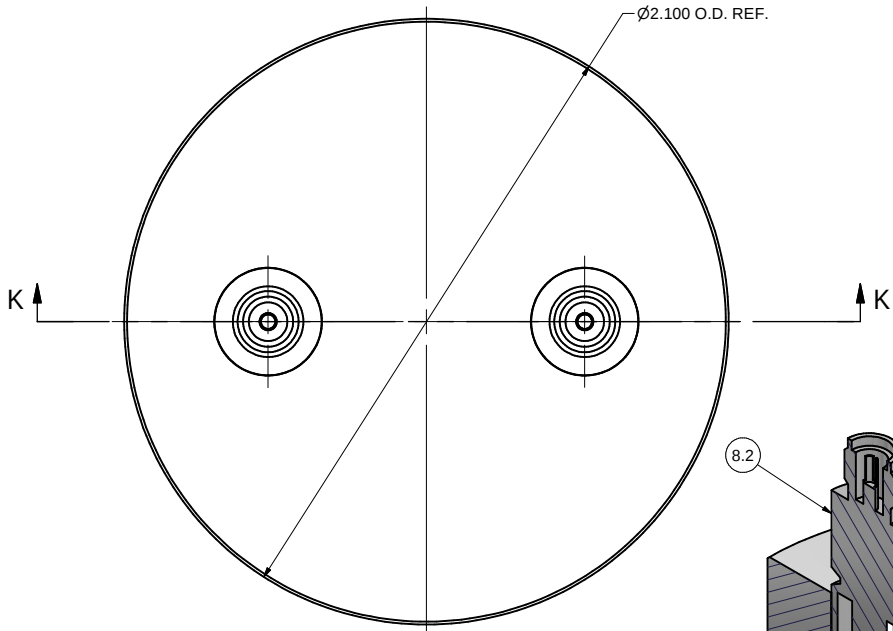
11	Sheet 5	5" RFA Port Extend Tube	1					
10	Sheet 5	1/4" Pin	3					
9	Sheet 5	3/16" Pin	2					
8	Sheet 4	Pickup Button Asm	2					
7	Purchased	F02750150RCE	1					
6	Purchased	Gauge Port SST_Al Tube	1					Thermionics P/N ATS-150 USE Pt 3 & 5 of 6046-038
5	6046-038 Sh1 Item 1	CESR Oval Flange Asm, MK II	2					
4	Purchased	Alum Water Fitting, 1/2"	2					
3	Purchased	F06750500RT	1					
2	Sheet 6	RFA Housing	1					
1	Sheet 3	CESR Extrusion	1					

		ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
					QUANTITY						
D 6085-116 SH. NO. 2 OF 9	PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw									
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 0.00 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		CORNELL UNIVERSITY LEPP CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853							
				CESR Drift Beampipe for Carbon Coating Exploded View							
				CHECKED BY: Yulin Li							
				APPROVED BY: Mark Palmer							
A	REV.	DRAWN BY TMK	DRAWN FOR Y. Li	DATE 1/25/2009	SCALE	D	6085-116 SH. NO. 2 OF 9		REV. A		

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Revised BOM, new Part 8.3	3/16/09	Y.LI
B	B6-B7	ADDITIONAL ANNOTATION AND DIMENSION STYLE CHANGE FOR ITEM 8.1	6/18/10	LI

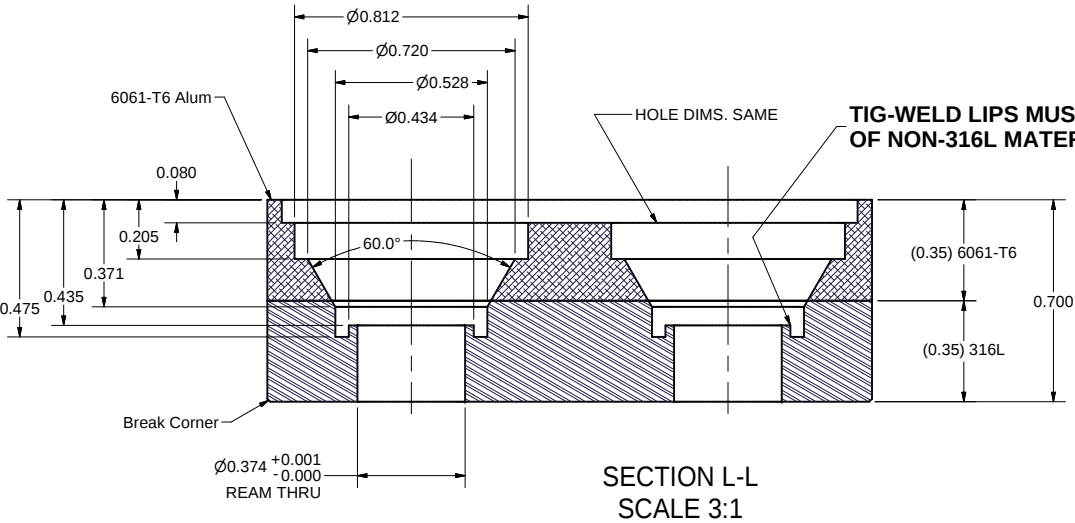


SCALE 2 : 1



SECTION K-K
SCALE 3:1

8 Pickup Button Asm
FILE NAME: 6085-116
SHEET NO.: 4
DFT. SCALE: 2 : 1
MATERIAL: As Noted
QTY: 2 PER ASM
NOTES: FOR THIS ASM. USE 6085-021, PT.11 AND
IT'S ASM STEPS AND ALSO 6085-060, PTS. 5+6

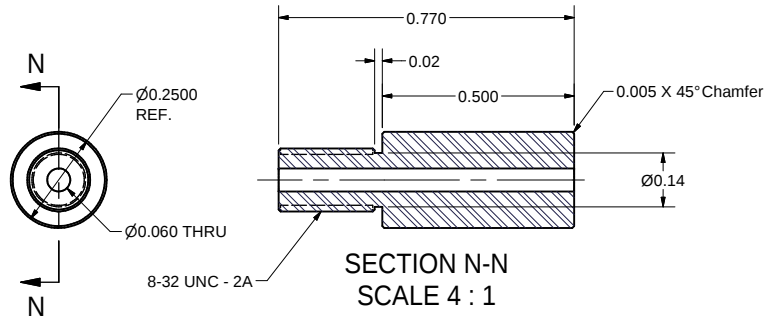


SECTION L-L
SCALE 3:1

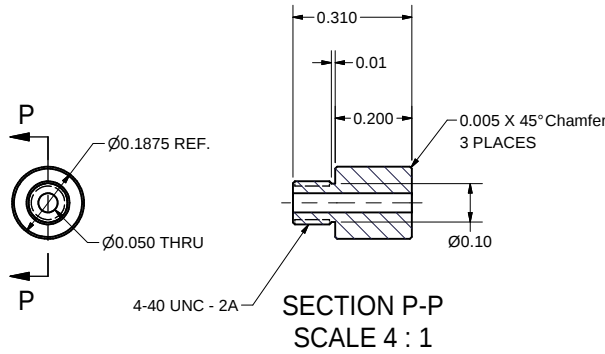
8.1 Button Housing
FILE NAME: 6085-116
SHEET NO.: 4
DFT. SCALE: 3:1
MATERIAL: Explosion Bonded Alum/SST
QTY: 1 PER SUB-ASM
NOTES: 1) Thermal cycle the finished part between 150C and Room
Temperature three times
2) Leak check the thermal cycled part to ensure leak-tightness
through the bonding zone

8.3	Sheet 5	BPM BUTTON Modified	2						
8.2	Purchased	SMA Connector Feedthrough	2					SST's #FA10638	
8.1	Sheet 4	Button Housing	1						
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	QUANTITY	REMARKS	REV.	
PRINT DISTR.	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .000 ± .010 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw						
6085-116 REV. 4	CR-1	CORNELL UNIVERSITY LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS	CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853						
REV. B	CR-1	CESR Drift Beampipe for Carbon Coating Pickup Button, Detail and Asm	CHECKED BY: Yulin Li	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 4 OF 9	REV. B

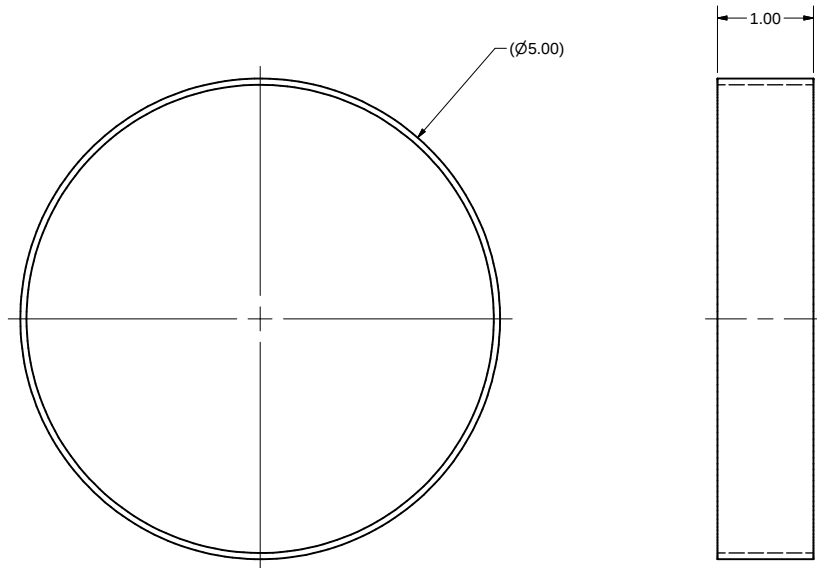
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added detail for new Part 11	3/13/09	Y.LI
B		Detail for Part 8.3	3/16/09	Y.LI



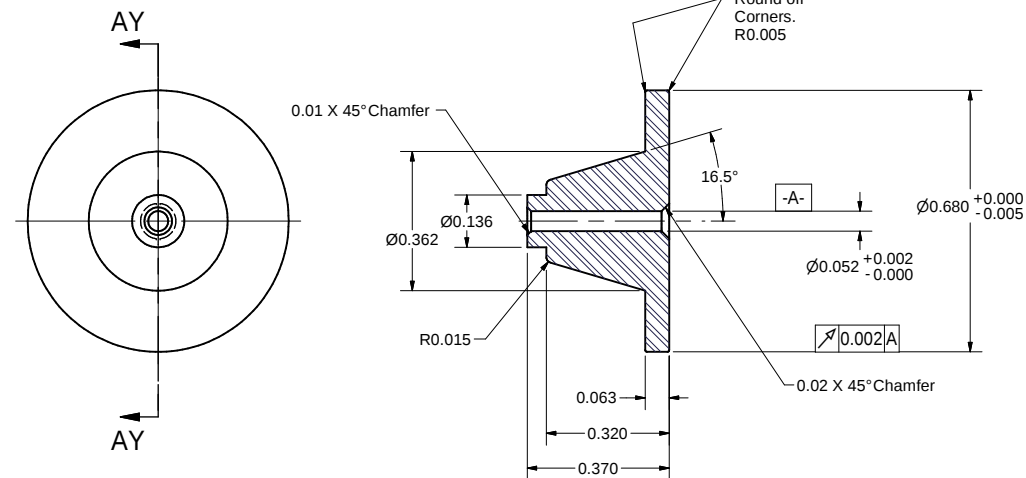
10 1/4" Pin
FILE NAME: 6085-116
SHEET NO.: 5
DFT. SCALE: 4 : 1
MATERIAL: 302 SST, 1/4" Precision Ground Pin
QTY: 3
NOTES:



9 3/16" Pin
FILE NAME: 6085-116
SHEET NO.: 5
DFT. SCALE: 4 : 1
MATERIAL: 302 SST, 3/16" DIA. Precision Ground Rod
QTY: 2
NOTES:



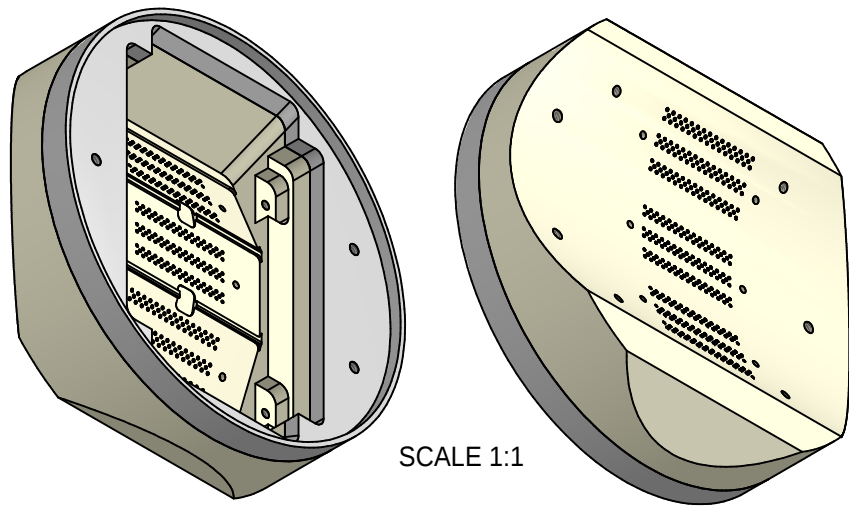
11 5" RFA Port Extension Tube
FILE NAME: 6085-116
SHEET NO.: 5
DFT. SCALE: 1 : 1
MATERIAL: 304L Tube, 5.00" OD, 0.065" Wall
QTY: 1 per asm
NOTES:



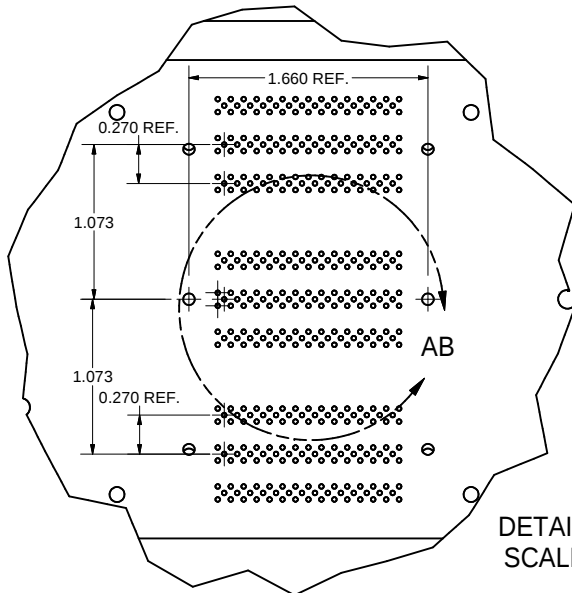
8.3 Modified BPM Button
FILE NAME: 6085-116
SHEET NO.: 5
DFT. SCALE: 3 : 1
MATERIAL: 304L SST
QTY: 4 per assembly
NOTES:

SECTION AY-AY
SCALE 4 : 1

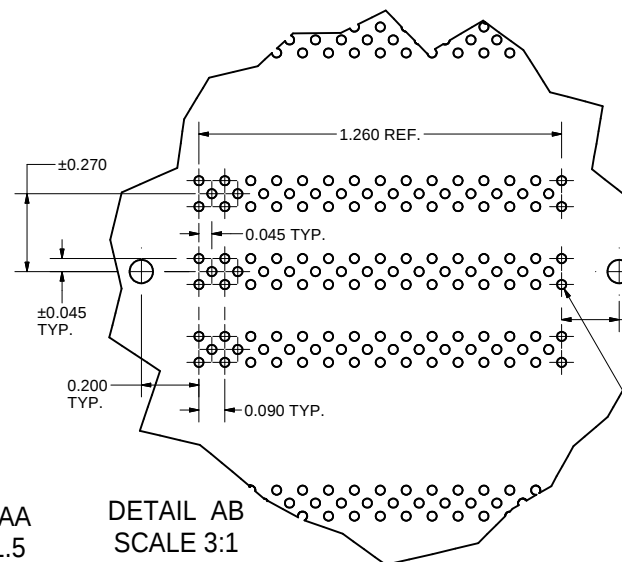
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								QUANTITY			
D	PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw									
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES 			 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 CESR Drift Beampipe for Carbon Coating Small Parts, Details						
6085-116 SH. NO. 5 OF 9		CHECKED BY: Yulin Li			DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 5 OF 9		REV. B
B	REV.	APPROVED BY: Mark Palmer									



SCALE 1:1



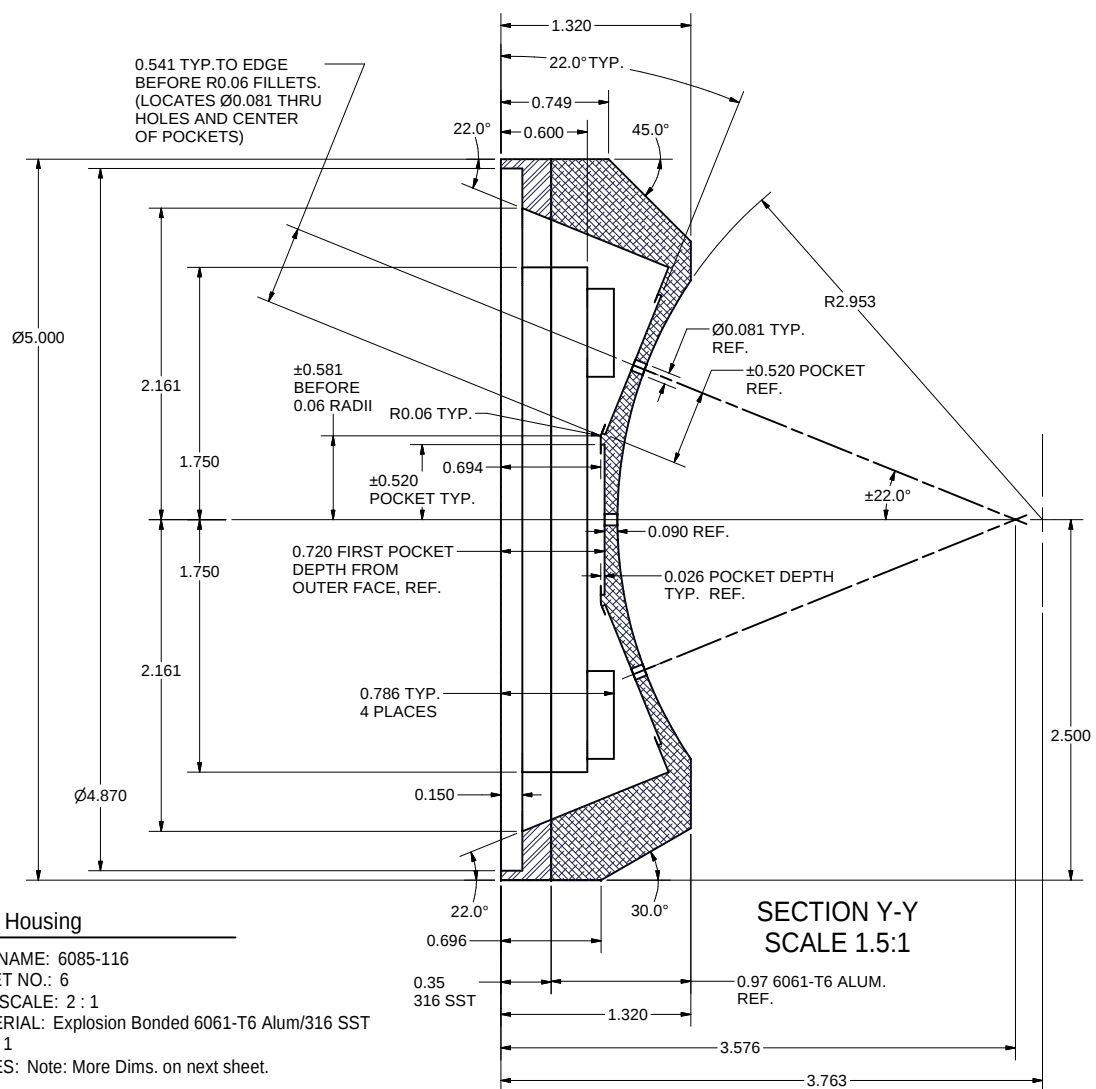
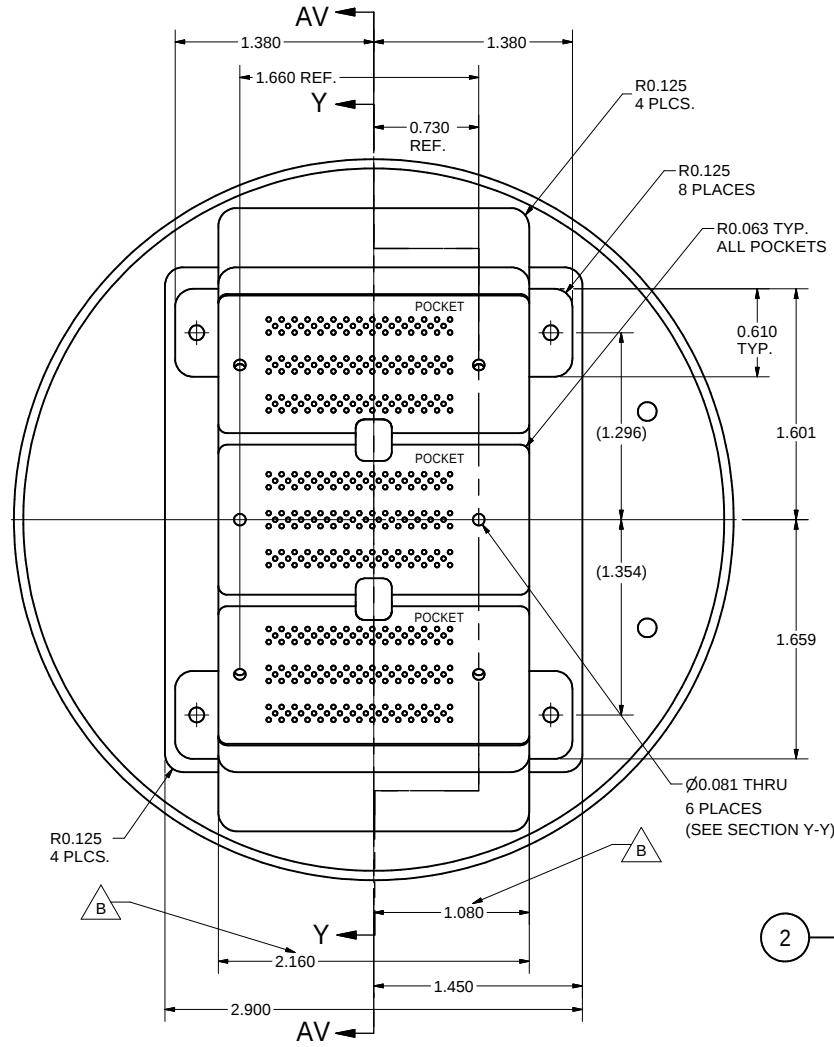
DETAIL AA
SCALE 1.5



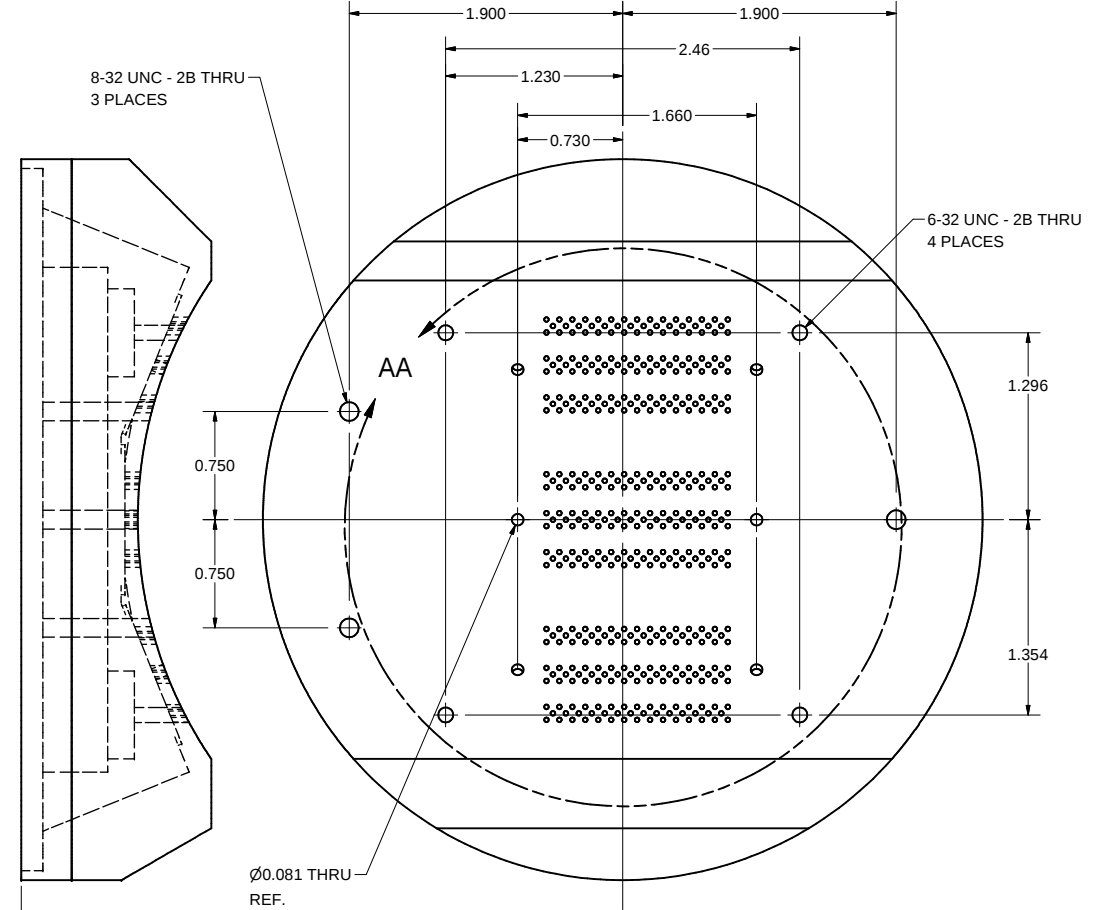
DETAIL AB
SCALE 3:1

Ø0.032 THRU, 378 PLACES
ALL 378 HOLES ARE $\perp$ TO DATUM 'A'.
DRILL WITH BACKING MATERIAL.
NO BURR ALLOWED.
DO NOT CHAMFER EDGES OF THESE HOLES.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	D9	Increased corner radius on the 22 degree slope cuts, from R0.063 to R0.125	3/3/09	Y.LI
B	A8-A9	Increased RFA porcket width by 0.160" (4 mm)	10/21/09	Y.LI
C	D5	Added missing pocket depth dimension.	10/26/09	TIO
D	A4-A9	Edited Note	6/17/10	jvc26



SECTION Y-Y
SCALE 1.5:1

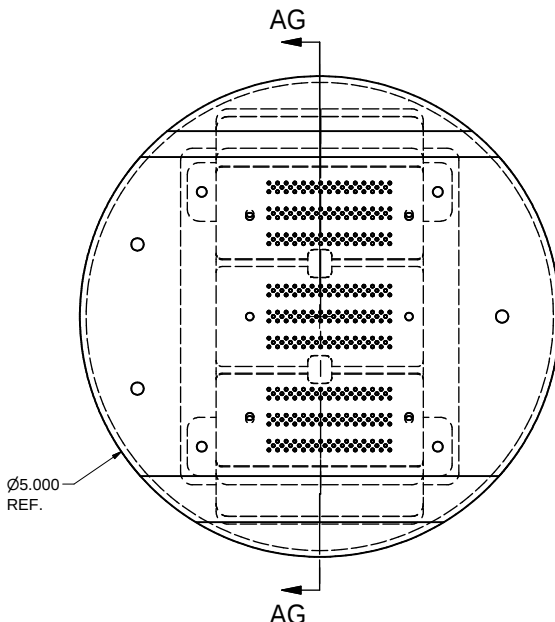
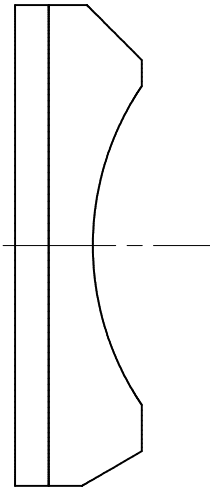
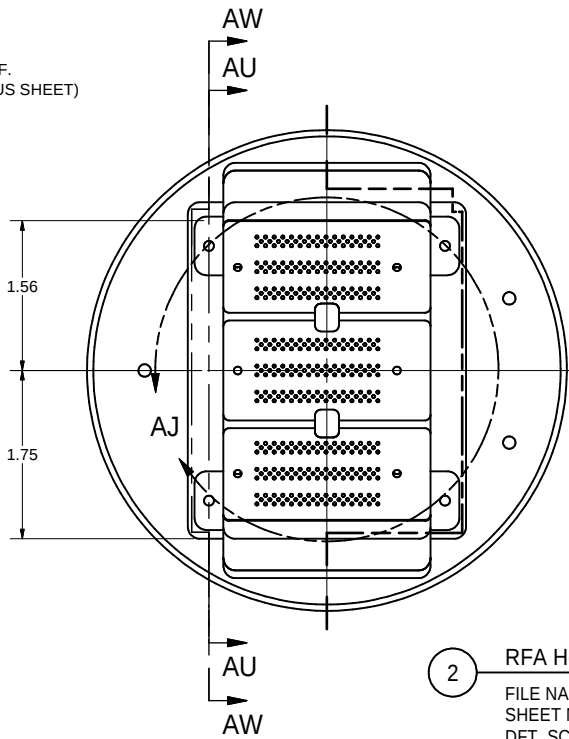
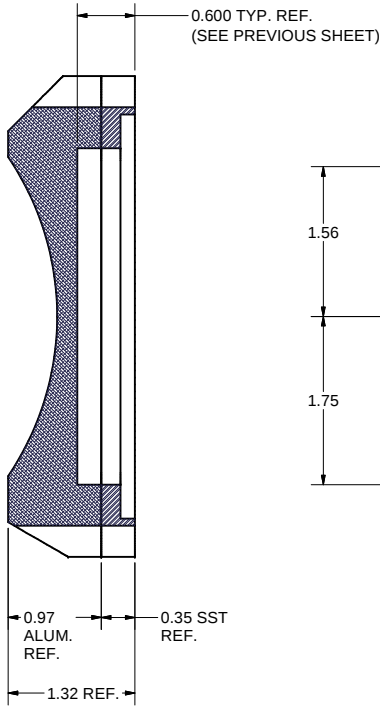
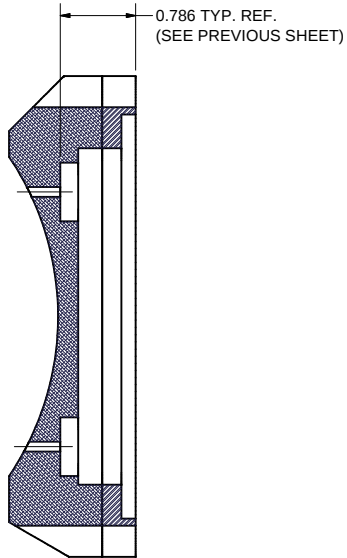
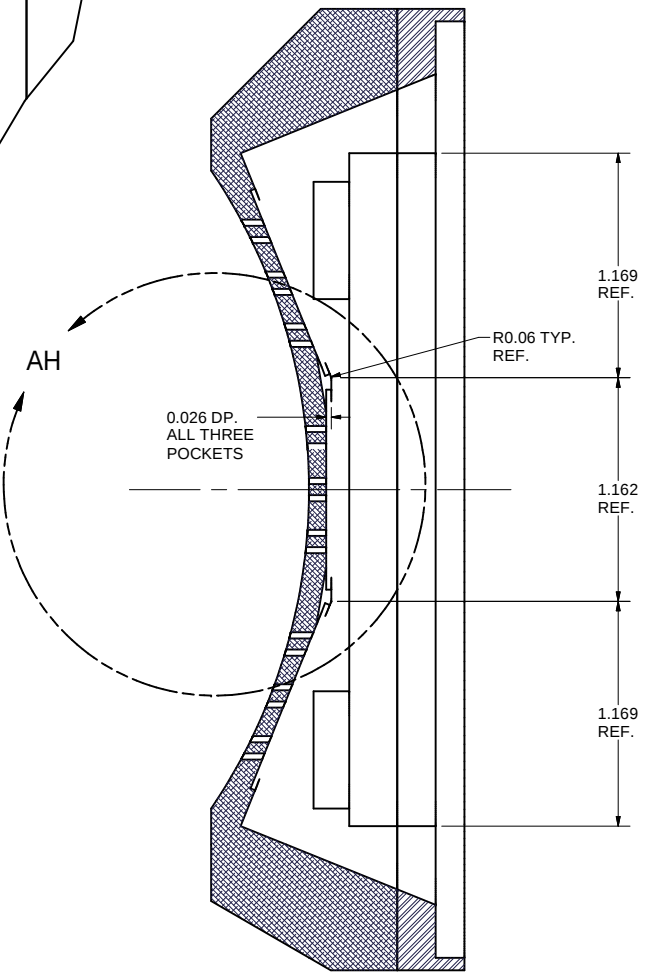
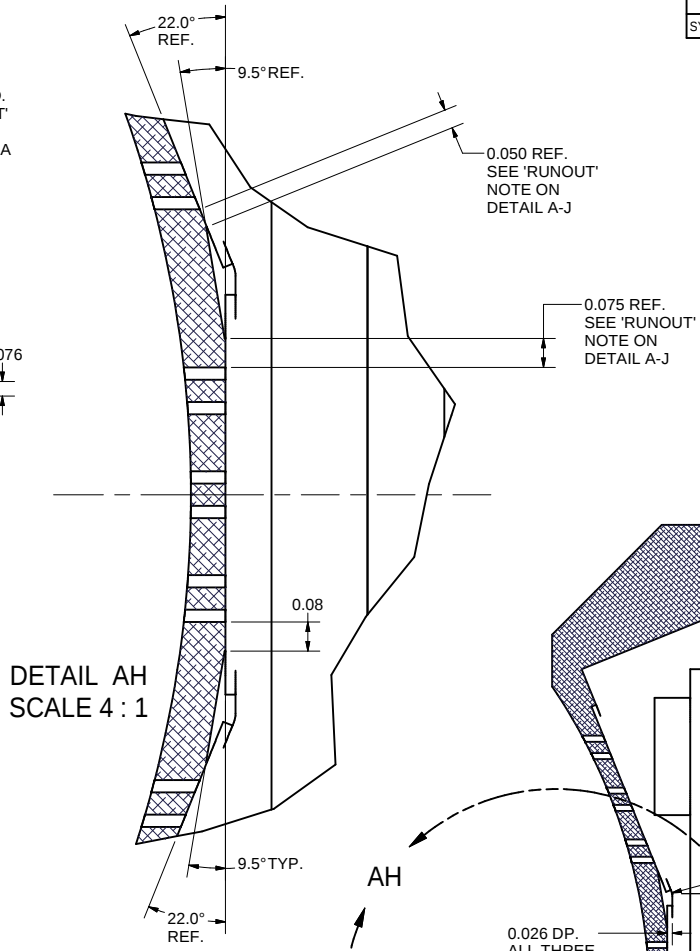
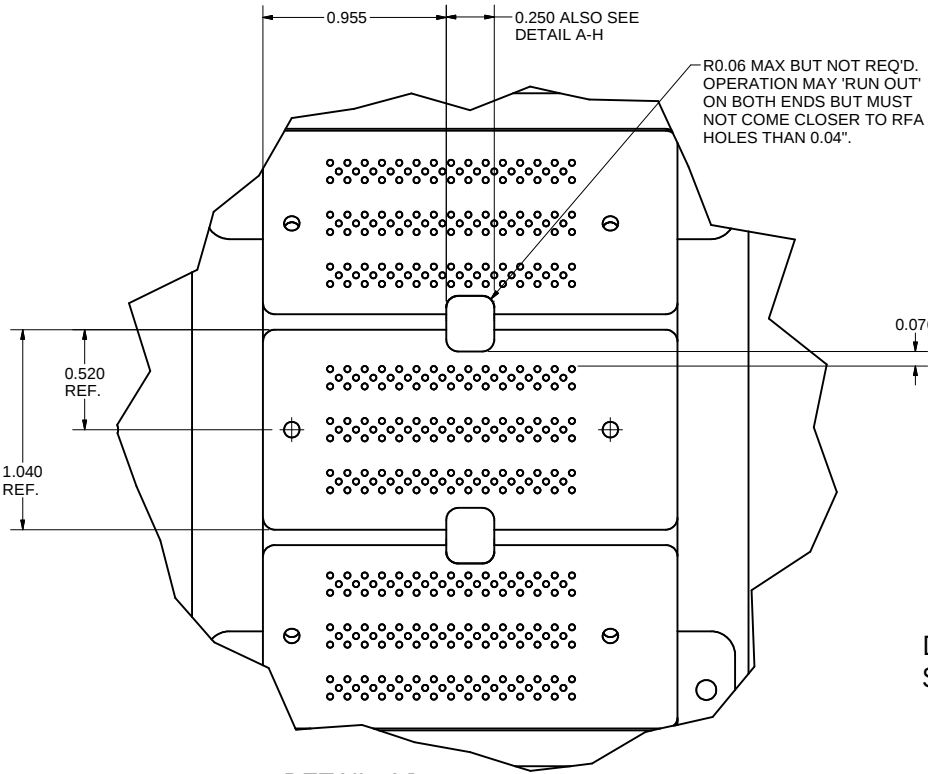
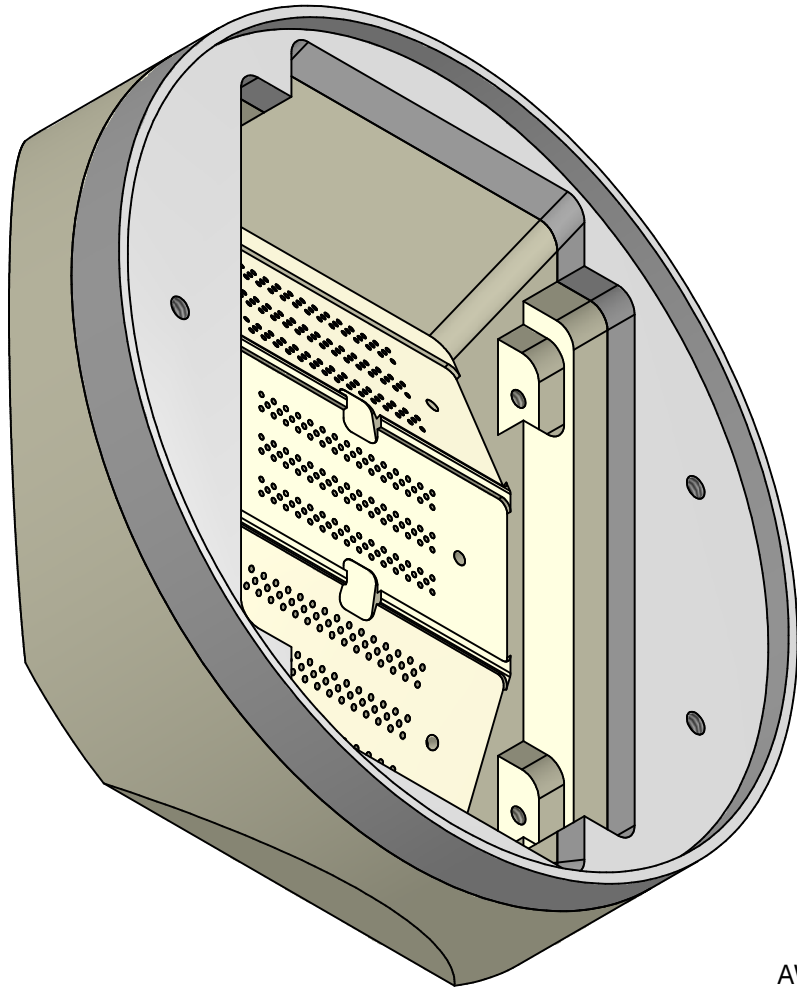


2 RFA Housing
FILE NAME: 6085-116
SHEET NO.: 6
DFT. SCALE: 2 : 1
MATERIAL: Explosion Bonded 6061-T6 Alum/316 SST
QTY: 1
NOTES: Note: More Dims. on next sheet.

NOTE: MACHINE BLANK (ITEM 2A) AND PERFORM TESTS AS SPECIFIED ON SHEET 9

	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
				QUANTITY					
D	PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw							
6085-116 SH. NO. 6 OF 9	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES 	 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 CESR Drift Beampipe for Carbon Coating RFA Housing Details						
D	REV.	CHECKED BY: Yulin Li APPROVED BY: Mark Palmer	DRAWN BY TMK	DRAWN FOR Y. Li	DATE 1/25/2009	SCALE	D	6085-116 SH. NO. 6 OF 9	REV. D

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.



2 RFA Housing (Continued)
FILE NAME: 6085-116
SHEET NO.: 7
DFT. SCALE: 2 : 1
MATERIAL: Explosion Bonded 6061-T6 Alum/316 SST
QTY: 1
NOTES: Note: More Dims. on previous sheet.

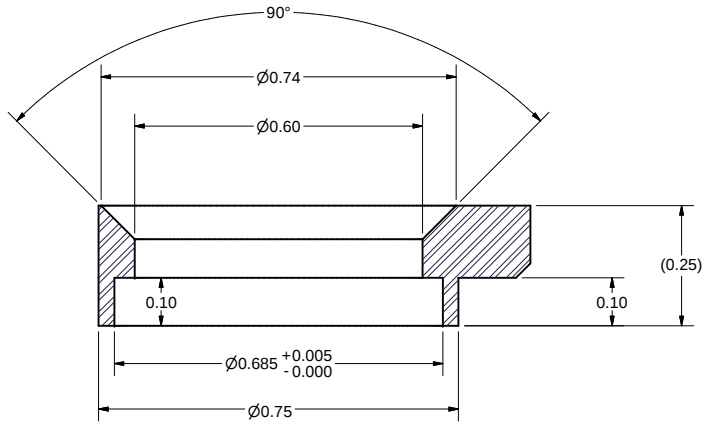
NOTE: MACHINE BLANK (ITEM 2A) AND PERFORM TESTS AS SPECIFIED ON SHEET 9

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
D	PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw							
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES 		 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853		CESR Drift Beampipe for Carbon Coating RFA Housing, Detail (Continued)			
SH. NO. 7 OF 9	6085-116	CHECKED BY: Yulin Li	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116	SH. NO. 7 OF 9	REV.
REV.		APPROVED BY: Mark Palmer							

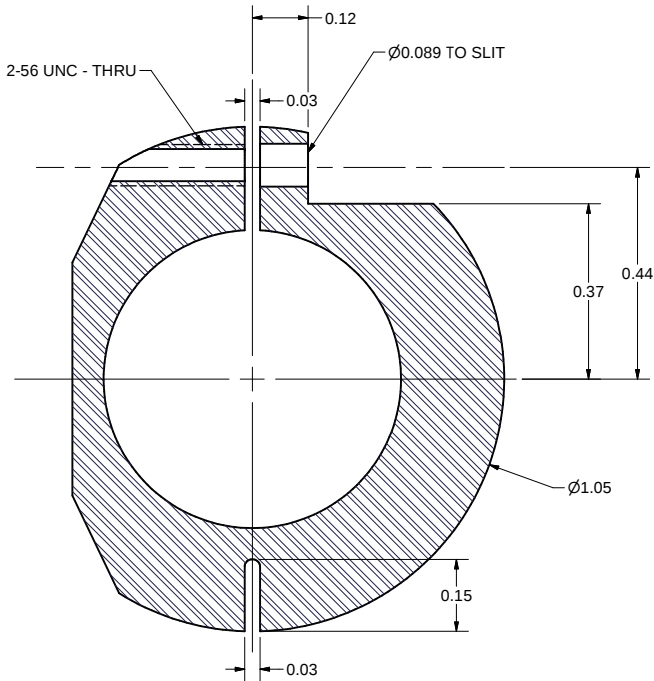
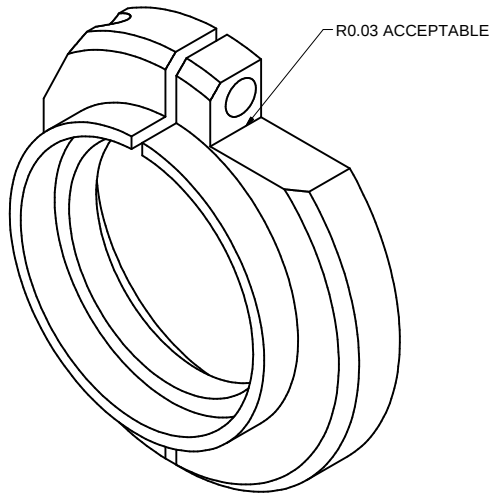
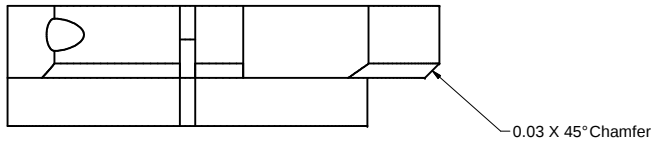
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added Sheet 9	6/17/10	jvc26

8.4 BUTTON WELDING CLAMP

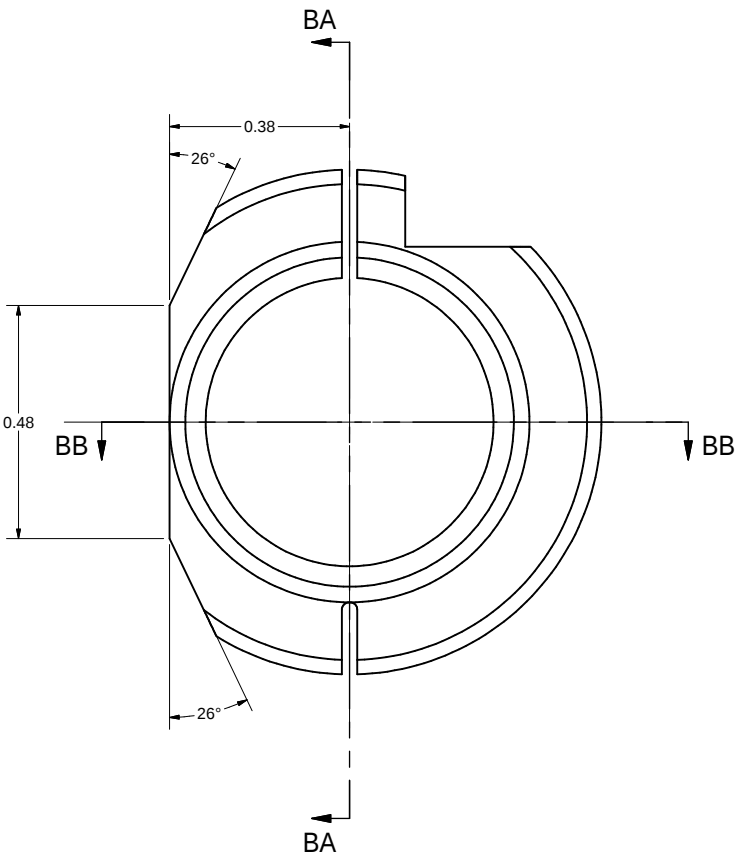
FILE NAME: 6085-116
SHEET NO.: 8
DFT. SCALE: 5 : 1
MATERIAL: 304L SST, 1/4" THK
QTY: 4 REQ'D
NOTES:



SECTION BB-BB
SCALE 5 : 1



SECTION BC-BC
SCALE 5 : 1



SECTION BA-BA
SCALE 5 : 1

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
D	PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw							
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES ✓		CORNELL UNIVERSITY  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
6085-116 SH. NO. 8 OF 9		CESR Drift Beampipe for Carbon Coating							
A	REV.	CHECKED BY: Yulin Li	DRAWN BY	DRAWN FOR	DATE	SCALE	D	6085-116	REV.
		APPROVED BY: Mark Palmer	TMK	Y. Li	1/25/2009			SH. NO. 8 OF 9	A

