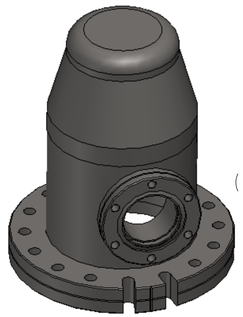
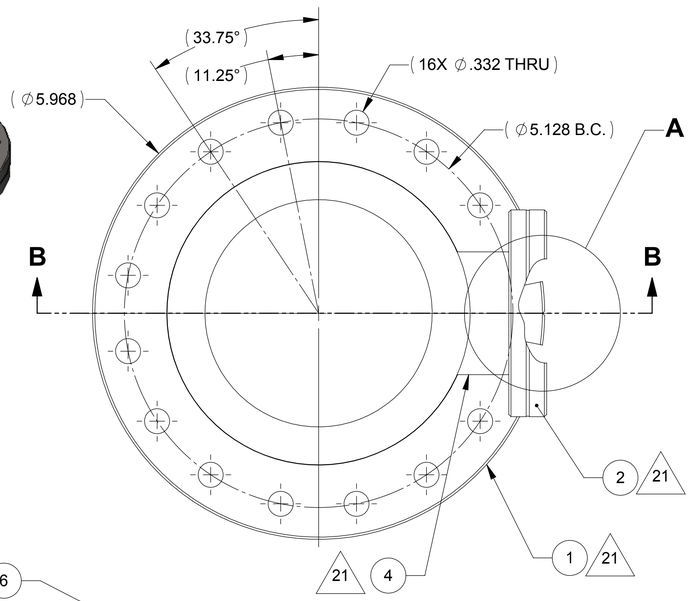
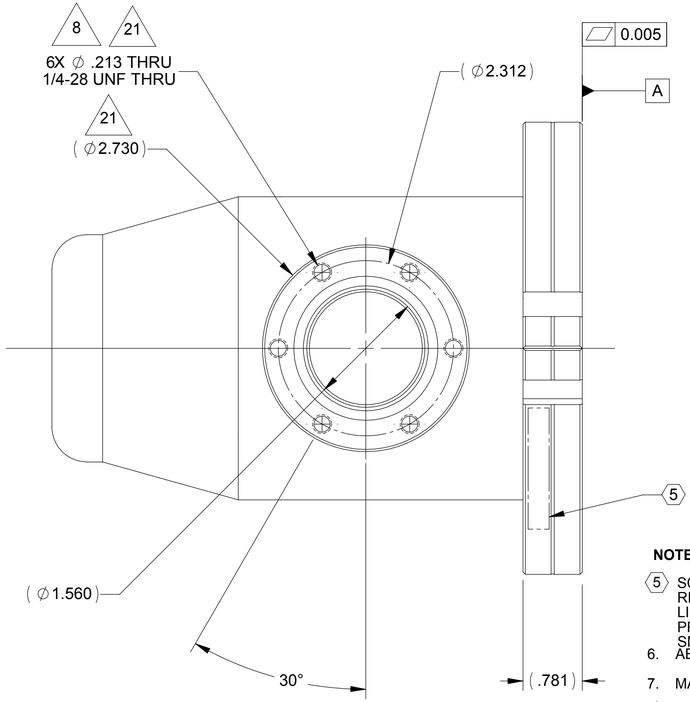
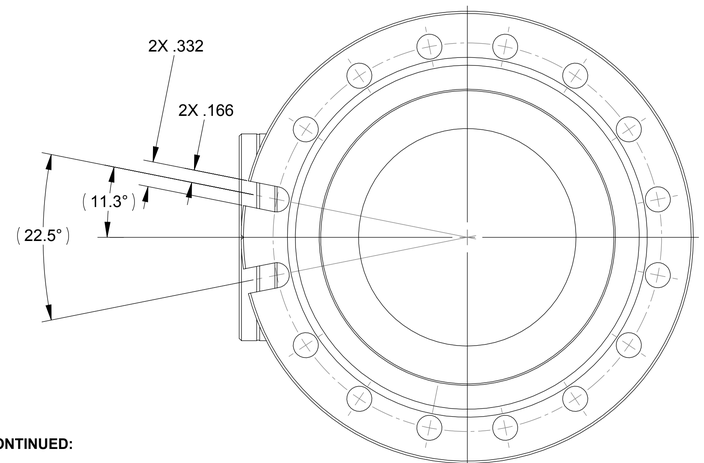
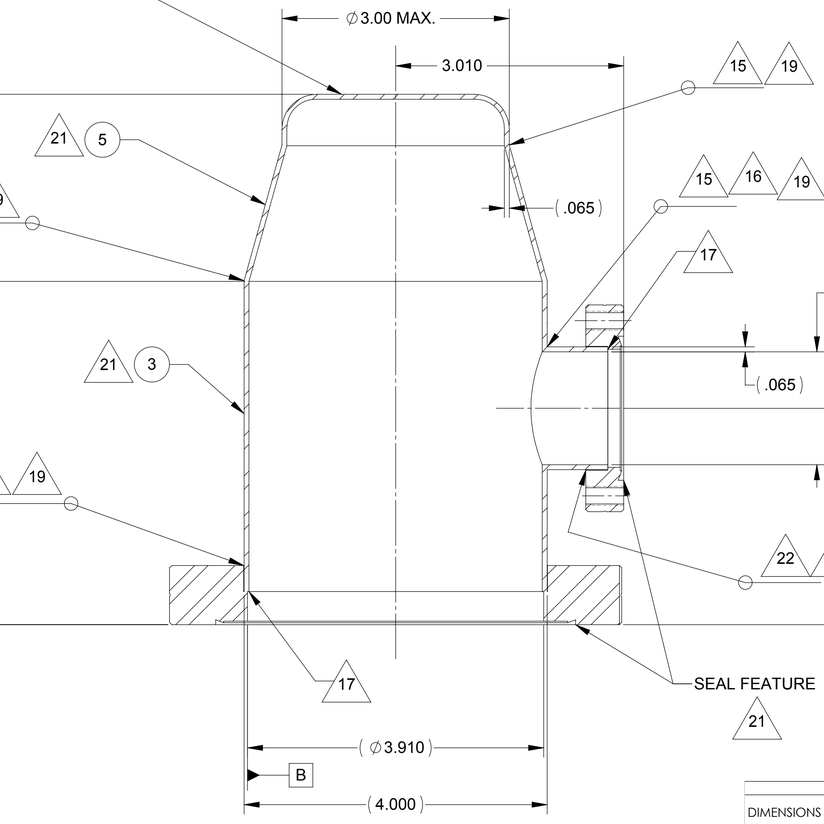
REV.	DATE	DCN #	DRAWING TREE #
V1	02 Dec. 2004	-	-
V2	10 Jun. 2009	-	-
V3	26 Jan. 2010	E0900436-x0	E1000025
V4	20 Feb. 2010	E1000048-x0	E1000025
V5	23 Apr. 2010	E1000140-v1	E1000025
V6	20 Mar. 2010	E1000171-v1	E1000025



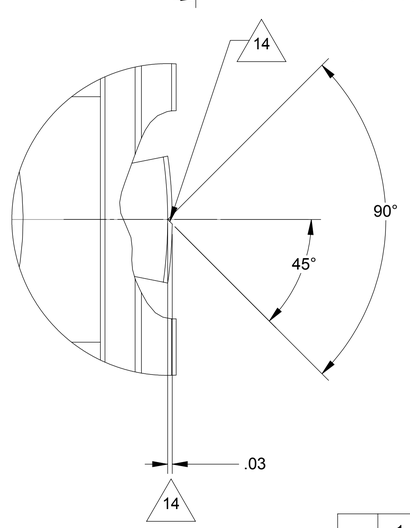








SECTION B-B



DETAIL A
SCALE 4 : 1

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INK OR DYES) DRAWING PART NUMBER, REVISION (AND VARIENT OR "TYPE" IF APPLICABLE ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12 HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE DXXXXXXX-VY, TYPE-XX, S/N XXX.
6. ABRASIVE REMOVAL TECHNIQUES ARE NOT ACCEPTABLE.
7. MACHINE FILLET RADII .003-.015.
8. A PITCH DIAMETER LIMIT OF H11 APPLIES TO ALL TAPPED HOLES.
9. COUNTERSINK 82° ALL TAPPED HOLES TO MAJOR DIAMETER +.015/-.000.
10. COUNTERSINK 82° ALL DRILLED HOLES .015-.030 DEEP BOTH SIDES.
11. FEATURES THAT ARE REFERENCED OR UNDIMENSIONED SHALL CONFORM TO THE APPROPRIATE NOR-CAL PRODUCTS PART NUMBERS LISTED IN THE PARTS LIST.
12. REFERENCE MATING PART DRAWING D047822.
13. ELECTROPOLISH AFTER WELDING, MASK CF FLANGE GASKET SURFACES.
14. PHYSICAL CONFIGURATION OF VISUAL CLOCKING AID MAY VARY AT MANUFACTURER'S OPTION BUT SHALL BE LOCATED AS SPECIFIED.
15. WELD TO BE EXTERNAL FUSION GTAW UHV, CONTINUOUS AND FULL PENETRATION.
16. PULLED PORT CAN BE USED.
17. TACK WELD CAN BE USED IF NEEDED FOR SET UP. VOLUME MUST VENT TO INSIDE.
18. APPLIES PRIOR TO WELDING.
19. JOINT CONFIGURATION TO BE DETERMINED BY VENDOR.
20. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION LIGO-E0900364 AND WELDMENTS SPECIFICATION LIGO-E0900048.
21. NOTE ON BILL OF MATERIALS:VENDOR REFERENCES ARE PROVIDED AS EXAMPLE OF PARTS MEETING ALL SPECIFICATIONS. EQUIVALENTS ARE ALWAYS ACCEPTABLE UNLESS OTHERWISE SPECIFIED.
22. WELD TO BE CONTINUOUS EXTERNAL FUSION GTAW UHV.

QTY REQD	ITEM NO	REF DES	CAGE NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	ZONE
1	6			D047823-106	CAP, END	G-2W-300	(CRES 304)	
1	5			D047823-105	REDUCER, ∅4.00 TO ∅2.50 X .065 WALL	B-31W-400-250	(CRES 304)	
1	4			D047823-104	TUBE, ∅1.62 X .065 WALL	SST-162	(CRES 304)	
1	3			D047823-103	TUBE, ∅4.00 X .083 WALL	SST-400	(CRES 304)	
1	2			D047823-102	PORT, CF FLANGE ∅2.75	275-162N	(CRES 304)	
1	1			D047823-101	BASE, CF FLANGE ∅6.00	600-400N	(CRES 304)	
-1								

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

TOLERANCES:
.XX ± .015
.XXX ± .005

ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: AISI 304
FINISH: 63 µinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: SEI
NEXT ASSY: D047820

PART NAME: L4C Pod Top Hat

DESIGNER	ASI	10 Nov. 2009	SIZE: D	DWG. NO.: D047823 REV.: V6
DRAFTER	M.HILLARD	26 Dec. 2010		
CHECKER	F.MATICHARD	26 Dec. 2010		
APPROVAL	K.MASON	26 Dec. 2010	SCALE: 1:1	PROJECTION: SHEET 1 OF 1

D047823 L4C Vacuum Chamber top, PART PDM REV: V3, DRAWING PDM REV: V3-008