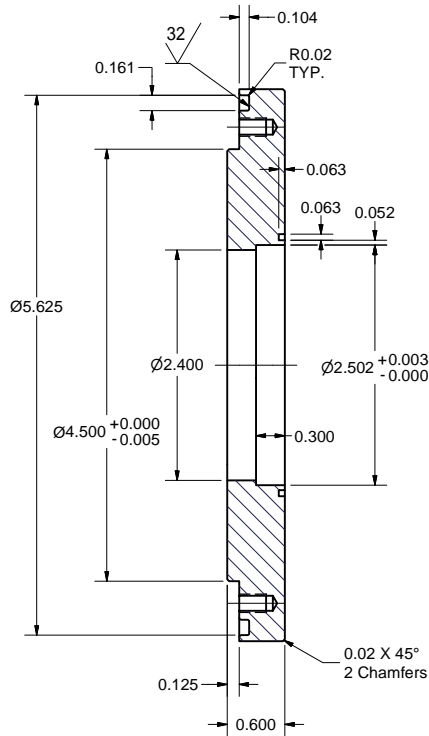
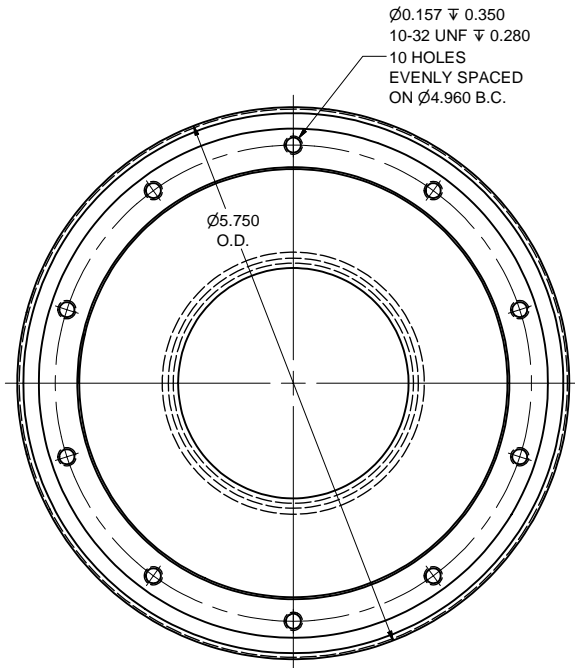
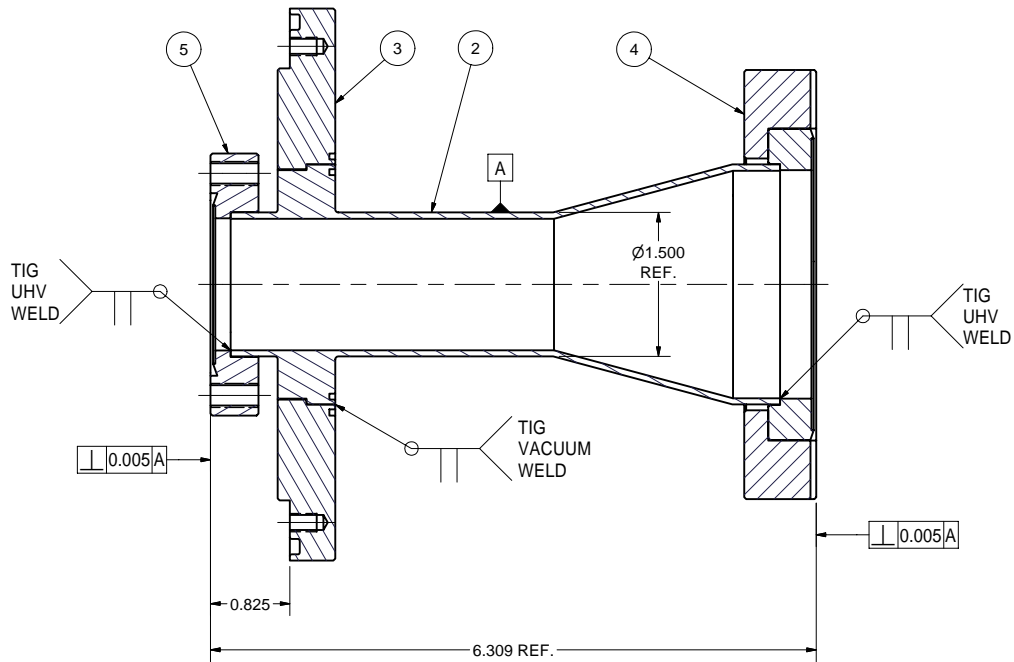
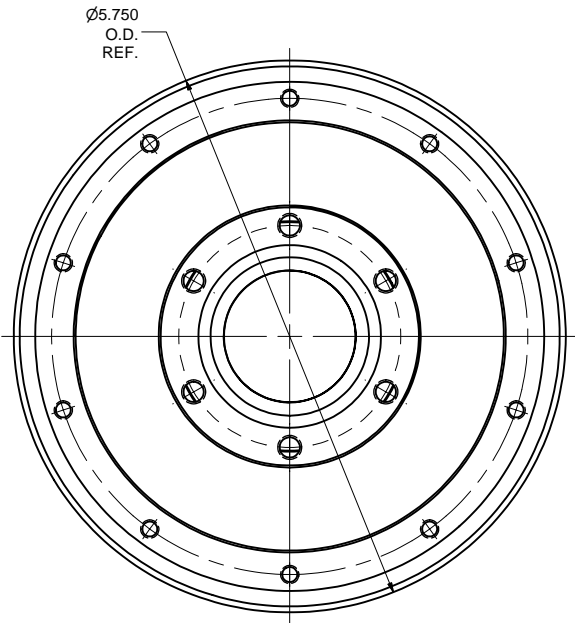
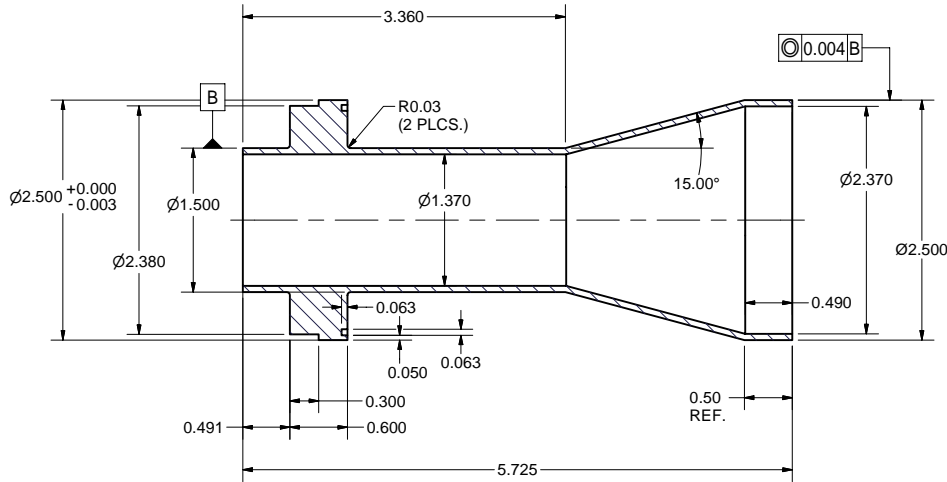
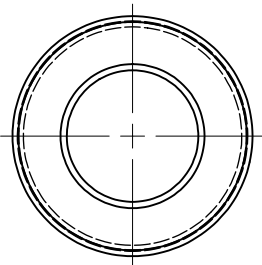


| REVISIONS |      |   |         |       |
|-----------|------|---|---------|-------|
| SYM.      | ZONE | DESCRIPTION   | DATE    | APP.  |
| A         |      | ITEM 2+3 WELD PREPARATION   | 2/6/07  | RHE/D |
| B         |      | Items 2 & 3 Mat'l was 316L St. Steel, in P.L. Items 4 & 5 Mat'l was 316L St. Steel & Chgd F-- No. JGL | 5/24/07 | TIO   |



**1 BEAM EXIT VACUUM CHAMBER ASSEMBLY**  
FILE NAME: 7102-046  
SHEET NO.: 1  
DFT. SCALE: 1:1  
MATERIAL:  
QTY: 1 PER CRYOMODULE  
NOTES: 1. LEAK CHECK WELDED JOINTS. LEAK RATE:  
FOR VACUUM WELD: < 2.0 E-8 Torr-l/sec,  
FOR UHV WELD: < 2.0 E-10 Torr-l/sec.

**3 BEAM EXIT CHAMBER FLANGE**  
FILE NAME: 7102-046  
SHEET NO.: 1  
DFT. SCALE: 1:1  
MATERIAL: 304L ST. STEEL  
QTY: 1 PER ASSEMBLY  
NOTES:



**2 TRANSITION TUBE 2**  
FILE NAME: 7102-046  
SHEET NO.: 1  
DFT. SCALE: 1:1  
MATERIAL: 304L ST. STEEL  
QTY: 1 PER ASSEMBLY  
NOTES:

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

| TECHNICAL RESOURCE APPROVALS<br>REQUIRED BEFORE FABRICATION |    |      |     |
|---|----|------|-----|
|   | OK | DATE | N/A |
| DRAFTING (O'Connell):                                       |    |      |     |
| MACHINE SHOP (Kaminski):                                    |    |      |     |
| CHEMISTRY (Conklin):  |    |      |     |
| ELECTRONICS SHOP (Barley):                                  |    |      |     |
| FURNACE BRAZING (Sherwood):                                 |    |      |     |
| BEAM WELDING (Sears):                                       |    |      |     |
| WELDING OTHER (Gallagher):                                  |    |      |     |
| UTILITIES INTEGRATION (Gallagher):                          |    |      |     |
| STOCKROOMS (Lockwood):                                      |    |      |     |

| ITEM   | DWG. NO.        | DESCRIPTION  | G1                   | G2                | G3         | REMARKS                          | REV.      |
|--|-----------------|--|----------------------|-------------------|------------|----------------------------------|-----------|
| 5  | Pur.            | 2-3/4" CF Non-Rotatable 1.5" Tube Tapped Flange, 304L St.Steel   | 1                    |                   |            | Varian's F02750150NT4, or equiv. |           |
| 4  | Pur.            | 4 1/2" CF Rotatable 2.5" Tube Flange, 304L St.Steel  | 1                    |                   |            | Varian's F04500250RC4, or equiv. |           |
| 3  | 7102-046 (SH.1) | BEAM EXIT CHAMBER FLANGE   | 1                    |                   |            |                                  |           |
| 2  | 7102-046 (SH.1) | TRANSITION TUBE 2  | 1                    |                   |            |                                  |           |
| 1  | 7102-046 (SH.1) | BEAM EXIT VACUUM CHAMBER ASSEMBLY  | X                    |                   |            |                                  |           |
| PLOT DATE: 5/24/2007<br>CAD FILE NAME: 7102-046.idw  |                 |  |                      |                   |            |                                  |           |
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES:<br>TOLERANCES ON:<br>.00 ± .010<br>.000 ± .005<br>FRACTIONS ± 1/64<br>ANGLES ± 0.5°<br>ALL SURFACES |                 | <b>CORNELL UNIVERSITY LEPP</b><br>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS<br>CORNELL UNIVERSITY<br>Floyd R. Newman Laboratory<br>Ithaca, NY 14853 |                      |                   |            |                                  |           |
| ERL INJECTOR CRYOMODULE<br>BEAM EXIT VACUUM CHAMBER  |                 | DRAWN BY<br>V.Medjdzade  | DRAWN FOR<br>M.Liepe | DATE<br>12/6/2006 | SCALE<br>- | 7102-046<br>SH. NO. 1 OF 1       | REV.<br>B |