

4

3

2

1

Ø37 [11.10] THRU  
(4) HOLES EQUALLY SPACED  
AS SHOWN ON A 6.875 B.C.

4X TIG  
1/16  
1/16

4X 45°

SEE DETAIL "A"

2.976 [75.60]  
4X

(.437 [11.10])

1.267 [32.18]

-B-  
.003

-A-  
.005 A

.235 [5.97]

1

.020 X 45° CHAMFER

TIG

63

2

.005 A

SECTION A-A

2X 1/4 X 45° CHAMFER

.836 [21.22]  
.375 [9.53]  
.750 [19.05]  
.374 [9.50]

DETAIL "A"

NOTES:

- WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:  
A) CIMCOOL 5 STAR 49  
B) TRIM SOL
- THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.
- KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
- DIMENSIONS IN [ ] ARE MILLIMETERS

| 2    |                 | 4" O.D. X .083 WALL TUBING             | 304 SST         | 1   |
|------|-----------------|--|-----------------|-----|
| 1    |                 | 6" O.D. VAC. FLANGE MDC'S CAT. #100026 | 304 SST         | 1   |
| ITEM | BYG/PART NUMBER | NOMENCLATURE OR DESCRIPTION            | MATERIAL / SPEC | QTY |

**PARTS LIST**

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

**A11619**

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|                                 |                 |                               |                 |  |
|---------------------------------|-----------------|-------------------------------|-----------------|--|
| DESIGNED BY<br>MUSCIA           | DATE<br>6/8/93  | CHEF DESIGN ENGINEER<br>D.SHU | DATE<br>8/31/93 | TITLE<br><b>ADVANCED PHOTON SOURCE</b><br>V3 APS I.D. FRONT END<br>SLOW VALVE & FAST VALVE<br>VACUUM CHAMBER FLANGE<br>WELDMENT SUB-ASSEMBLY |
| CHECKED BY<br>J.CHANG           | DATE<br>8/31/93 | OP LEADER<br>T.M.KUZAY        | DATE<br>8/31/93 |  |
| DESIGNER<br>MUSCIA              | DATE<br>8/31/93 | PROJECT MGR                   |                 |  |
| RESPONSIBLE ENGINEER<br>J.CHANG | DATE<br>8/31/93 | APPROVED/RELEASED             |                 |  |

| SYN | CHANGE DESCRIPTION | BY | CHKD | DATE |
|-----|--------------------|----|------|------|
|     | REVISIONS          |    |      |      |

|                                 |               |           |   |
|---------------------------------|---------------|-----------|---|
| MATERIAL<br>304 STAINLESS STEEL | SCALE<br>HALF | SIZE<br>C | DRAWING NUMBER<br>P4105090703-830200-00 |
| DO NOT SCALE DRAWING            | SHEET 1 of 1  |           |   |

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