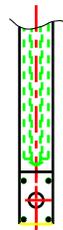


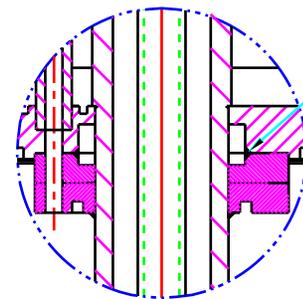
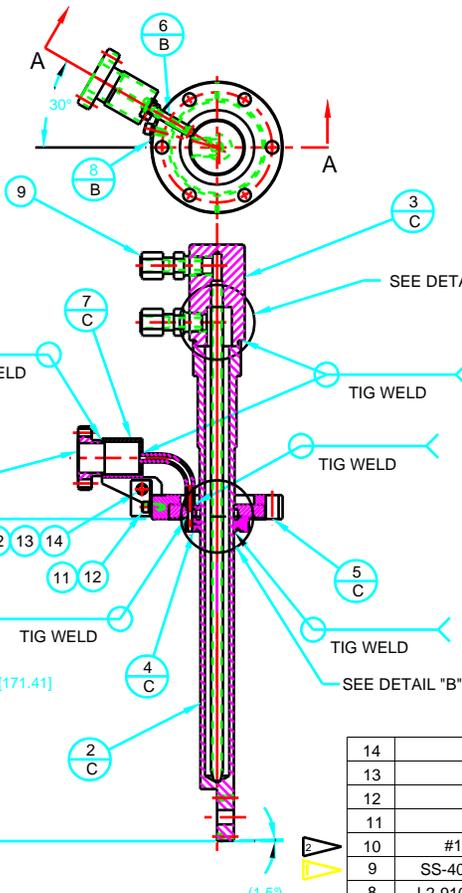
DETAIL "A"
SCALE 4X

SILVER SOLDER
.07
G
1
C



.005 A
6.7486 [171.41]
-A-
10
11 12
12 13 14
TIG WELD
4
C
2
C

SECTION A - A



DETAIL "B"
SCALE 4X

TIG WELD

NOTES:

1. BONDING ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:

- ALCATEL ASM-110TCL
- VARIAN NCR 925 OR 936
- VEECO MS-9, MS-90 OR MS-18
- Du PONT CEC 24-120B

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

2. CERTIFICATION OF ULTRA SONIC TEST AND VACUUM EXAMINATION SHALL BE SIGNED BY A CONTRACTOR REPRESENTATIVE AUTHORIZED TO SIGN SUCH CERTIFICATION

3. WATER PRESSURE TEST AT 500 P.S.I. AFTER WELDING AND ASSEMBLY

4. KEEP THE ASSEMBLY CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.

5. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
14		#6 - 32 UNC 2B NUT	SST	1
13		#6 - 32 X 5/16" LG. SOC. HD. SCREW	SST	1
12		.148 I.D. X .031 THK. LOCK WASHER	SST	2
11		#6 - 32 X 3/16" LG. SOC. HD. SCREW	SST	1
10	#110004	1 1/3 O.D. NONROTATABLE VACUUM FLG.	SST	1
9	SS-400-1-2	1/8 - 27 N.P.T. MALE CONNECTOR	SST	2
8	L2-910212-00	L2-90 FEED THROUGH TUBE SUP. BRKT.	SST	1
7	L2-910210-01	L2-90 FEED THROUGH ADAPTER TUBE	SST	1
6	L2-910206-01	L2-90 INLET PROBE TUBE	SST	1
5	L2-910205-02	L2-90 WATER COOLED SLIT VAC. FLG.	SST	1
4	L2-910204-02	L2-90 COPPER TO METAL ADAPTER	SST	1
3	P4105091502-910203	L2-90 WATER COOLING ENTRANCE PORT	MONEL 400	1
2	B4-220102-00	B4-20 DMD. SENSOR MTG. STEM	OFHC COPPER	1
1	B4-220101-00	B4-20 INNER COOLING TUBE	OFHC COPPER	1

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES

TERMINALS: DECIMALS ANGULARS
 .01 (0.25) .030"
 .005 (0.13)

SURFACE FINISH: 125 ✓
 REMOVE ALL BURRS AND BREAK SHARP EDGES TO MAX.
 SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ASST D4
 DIMENSIONS & TOLERANCES IN ACCORDANCE WITH LATEST ASST D4

DO NOT SCALE DRAWING

PARTS LIST

THIS DRAWING IS THE PROPERTY OF
ARGONNE NATIONAL LABORATORY

B4220100-01

DRAWN BY MUSCIA	DATE 3/4/97	CHIEF DESIGN ENGINEER D. Shu	DATE 3/25/97	TITLE ADVANCED PHOTON SOURCE
CHECKED BY J. BARRAZA	DATE 3/19/97	OP. LEADER T.M. Kuzay	DATE 3/27/97	B4-20 APS SOFT X-RAY BEAM POSITION MONITOR WATER COOLED DIAMOND SENSOR MOUNTING STEM ASSEMBLY
DESIGNER SHU/MUSCIA	DATE 3/4/97	PROJECT MGR.	DATE	
RESPONSIBLE ENGINEER D. SHU	DATE 3/25/97	APPROVED/RELEASED	DATE	

MATERIAL: SEE PARTS LIST

SCALE: HALF
 SHEET: 1 of 1
 SIZE: C
 DRAWING NUMBER: B4-220100-01

1	"C" SIZE DWG. WAS "D" SIZE DWG.				
	DRAWING BROUGHT UP TO DATE	M.J.M.	J.B.	4/21/98	
SYN	CHANGE DESCRIPTION	BY	CHKD	DATE	
	REVISIONS				