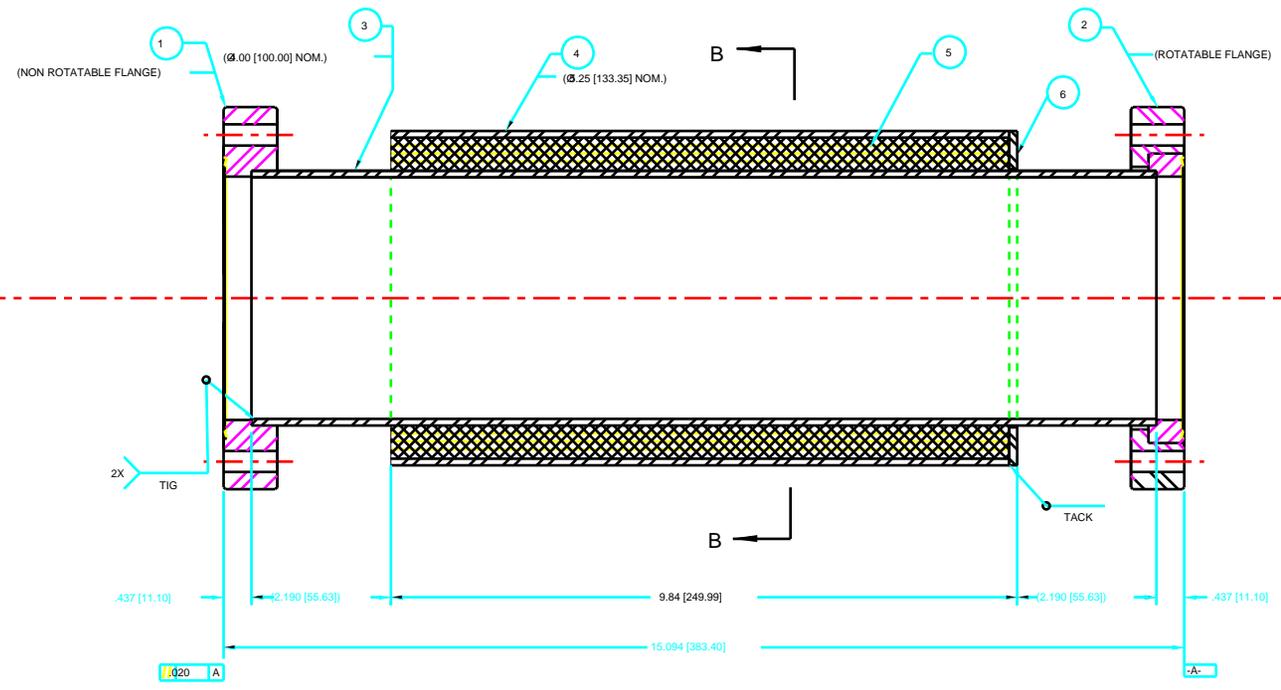


SECTION B-B



SECTION A-A

NOTES:
 1. 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.

2. CHAMBER ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS
 ALCATEL SAM-110TCL
 Du PONT CEC 24-120B
 VARIAN MS-9, MS-90 OR MS-18

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.
 FINAL TEST WILL CONSIST OF SURROUNDING THE CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION ON THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

- 3. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
- 4. DIMENSIONS IN [] ARE MILLIMETERS
- 5. SHIELDED CAN SHALL BE TO SLIDE FREELY
- 6. THIS UHV PART MUST BE BAKEABLE TO 170 C.

ASSEMBLY PROCEDURE:
 1. WELD 4.0" TUBE (ITEM 3) TO 6.0" FLANGE (ITEM 1)
 2. SLIDE SHIELDED CAN IN PLACE - [WELD 5.25" TUBE (ITEM 4) TO END PLATE (ITEM 6) AND INSERT LEAD COIL (ITEM 5)].
 3. WELD 4.0" TUBE (ITEM 3) TO 6.0" FLANGE (ITEM 2).

LOG NO.	ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
A2267600	6	P4105090602-310203-00	U2 TRANSITION PIPE 1-ID-C. END PLATE	304 SS	1
A2272800	5	P4105090602-310401-00	U2 TRANSITION PIPE 3-ID-C. LEAD COIL	LEAD GRADE "C"	1
	4		TUBING - 5.25[133.35] O.D. x .125[3.17] WALL	304 SS	1
	3		TUBING - 4.00[100.00] O.D. x .125[3.17] WALL	304 SS	1
	2		ROTATABLE FLANGE: 6" O.D. x 4.00 I.D. MDC'S CAT. 100026	304 SS	1
	1		FLANGE: 6" O.D. x 4.00 I.D. MDC'S CAT. 110026	304 SS	1

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES DECIMALS ANGULAR TOLERANCES: .XX - .03 (0.762) .XXX - .005 (0.127) SURFACE ROUGHNESS 125

REMOVE ALL BURRS AND BREAK SHARP EDGES (R4.0)

SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5

DO NOT SCALE DRAWING

LOG NUMBER: A2326000

ARGONNE NATIONAL LABORATORY

ADVANCED PHOTON SOURCE

U2 TRANSITION PIPE 2-ID-D ASSEMBLY

DESIGNER: SANCHEZ DATE: 8/25/95

RESPONSIBLE ENGINEER: T. SANCHEZ DATE: 5/18/95

SCALE: 1=1

SHEET: 1 of 1

DWG. NUMBER: P4105090602-310900-00

BY	CHANGE DESCRIPTION	BY	CHKD	DATE