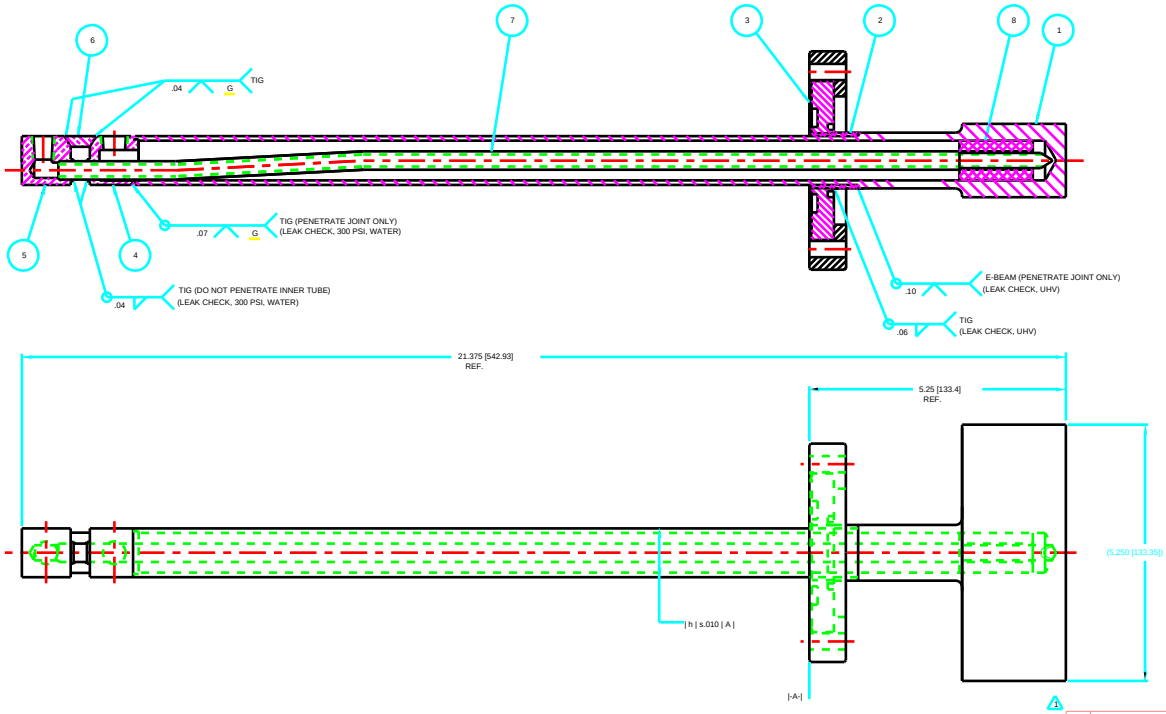
(ϕ	PLOT SCALE: 1=1	DWG. SCALE: 1	A1529401



NOTES:

1. THIS IS USED FOR AN ULTRA - HIGH VACUUM CHAMBER (UHV).
2. THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTRO-POLISHING, THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.
3. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
4. DEVICE 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-11OTCL
   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 CHAMBER (BAGGING) WITH HELIUM. THE CHAMBER WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.
5. ALL DIMENSIONS WITH ARE IN MILLIMETERS

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
8	P4102020103-210008	P3-20 COPPER MESH	COPPER, 75% Ø	1
7	P4105090906-250107	P6 INNER TUBE	OFHC COPPER	1
6	P4102020103-210006	P3-20 PORT SUPPORT	OFHC COPPER	1
5	P4102020103-210005	P3-20 ENTRANCE PORT	OFHC COPPER	1
4	P4102020103-210004	P3-20 EXIT PORT	OFHC COPPER	1
3	P4102020103-210003	P3-20 4-1/2" ROTATABLE FLANGE (MDC)	S.S. 304	1
2	P4102020103-210002	P3-20 INTERFACE SST TUBE	S.S. 304	1
1	P4105090906-250101	P6 COOLING BLOCK & TUBE	OFHC COPPER	1

PARTS LIST

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. TOLERANCES: DECIMALS X ± .03, .XX ± .01, .XXX ± .005; ANGULAR ± 3°. SURFACE ROUGHNESS 125. REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX. SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1. DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5

DO NOT SCALE DRAWING

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
1	REV. NO'S REMOVED;	J.G.		
1	ITEM 9 & NOTE 6 REMOVED;	J.G.		

REVISIONS

LOG NUMBER A1529401

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DRAWN BY	J.GOGOL	DATE 12/20/93	CHIEF DESIGN ENGINEER D.SHU 5/12/94
CHECKED BY	J.CHANG	5/4/94	DFUSSING T.M.KUZAY 5/16/94
DESIGNER	J.GOGOL/J.CHANG	12/20/93	PROJECT MGR. —
RESPONSIBLE ENGINEER	J.CHANG	5/4/94	APPROVING/RELEASED —

MATERIAL SEE PARTS LIST

TITLE
ADVANCED PHOTON SOURCE
P6 W/M/S INTEGRAL SHUTTER
WHITE BEAM ABSORBER
COOLING ASSEMBLY
(E-BEAM WELD STYLE)

SCALE 1:1 SHEET 1 of 1 SIZE D

DRAWING NUMBER P4105090906-250100-01