



- NOTES:
- THIS IS USED FOR AN ULTRA - HIGH VACUUM CHAMBER (UHV).
  - 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.
  - DEVICE SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2X 10<sup>-10</sup> 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 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.
  - ALL DIMENSIONS WITH ARE MILLIMETERS

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
8	P4102020103-210008	P3-20 COPPER MESH	COPPER, 75% ∅	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	P4105090909-320101	P9-30 COOLING BLOCK & TUBE		1

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

TOLERANCES: DECIMALS ANGULAR

ASSEMBLY: J.GOGOL DATE: 9/20/94 DATE: 10/19/94

CHECKED BY: J.CHANG DATE: 10/17/94 DATE: 10/19/94

DESIGNER: J.GOGOL DATE: 10/17/94

RESPONSIBLE ENGINEER: J.CHANG DATE: 10/17/94

APPROVED/RELEASED: [Signature]

MATERIAL: SEE PARTS LIST

SCALE: 1:1

SHEET: 1 of 1

DRAWING NUMBER: P4105090909-320100-01

REV	DESCRIPTION	BY	CHKD	DATE
1	OFHC COPPER REMOVED.	J.G.	J.C.	6/15/95

DO NOT SCALE DRAWING