



NOTES:

1. THIS DRAWING IS FOR EXPLOSIVE BONDING USE ONLY.
2. THIS IS A ULTRA - HIGH WELDMENT ASSEMBLY (UHV) ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING , THE ASSEMBLY NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING, AND DRY NITROGEN BLOW DOWN.
3. 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 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 ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION

IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENCED WITHIN 1 MIN.

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

5. ALL SURFACE FINISHES TO BE ⁶³ ✓
6. DIMENSIONS IN [] ARE MILLIMETERS MACHINE AFTER EXPLOSIVE BONDING

1	ADDED OFHC TO MAT'L	RAF	5/95
SYM	CHANGE DESCRIPTION	BY	CHKD DATE

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER A1703501	THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY	
TOLERANCES		DRAWN BY FUHRMANN		
DECIMALS	ANGULAR	DATE 3/8/94	CHIEF DESIGN ENGINEER D.SHU	DATE 3/14/94
.X - .03 [0.7620]	- .25	CHECKED BY TCHESKIDOV	GP LEADER T.M. KUZAY	TITLE ADVANCED PHOTON SOURCE
.XX - .01 [0.25]		DESIGNER FUHRMANN/TCHESKIDOV	PROJECT MGR.	BENDING MAGNET MONO BEAM
.XXX - .005 [0.127]		RESPONSIBLE ENGINEER TCHESKIDOV	APPROVED/RELEASED	HORIZONTAL AND VERTICAL SLITS
SURFACE ROUGHNESS 125 ✓		CAP		
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.		MATERIAL NOTED		
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1		SCALE 1:1	SIZE C	DRAWING NUMBER P4105091504-200101-01
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		SHEET 1 of 1		
DO NOT SCALE DRAWING				