



SECTION A-A

NOTES:

1. MAKE FROM MDC'S VACUUM FLANGE CAT. #100025
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
A) CIMCOOL 5 STAR 49
B) TRIM SOL
3. THIS IS A UHV PART, ELECTROPOLISHING IS NEEDED BEFORE WELDING. PRIOR TO ELECTROPOLISHING, THE PART MUST GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN.
4. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
5. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
2	AND FOR REF ONLY ADDED	M.J.M.		
1	Ø.014 +.002 -.000 WAS			
	Ø.009 +.002 -.000			
1	DRAWING TITLE REVISED	M.J.M.		

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER A16959		
TOLERANCES		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY		
DECIMALS	ANGULAR			
.X - .03 [.7620]	- .25			
.XX - .01 [0.25]				
.XXX - .005 [0.127]				
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				
DRAWN BY MUSCIA		DATE 3/29/93	CHIEF DESIGN ENGINEER D. SHU	DATE 5/7/93
CHECKED BY H.G.E.		DATE 5/4/93	GP LEADER T.M. KUZAY	DATE 5/7/93
DESIGNER MUSCIA		PROJECT MGR.		
RESPONSIBLE ENGINEER D. SHU		APPROVED/RELEASED		
MATERIAL SEE NOTE #1				
		SCALE 1:1	SIZE C	TITLE ADVANCED PHOTON SOURCE M1 APS I.D. FRONT END 1-ST & 2-ND FIXED MASK MAIN BODY RIGHT END VACUUM FLANGE
		SHEET 1 of 1	DRAWING NUMBER P4102010101-210004-02	