



- NOTES:
1. 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
  2. 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.
  3. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
  4. DIMENSIONS IN [ ] ARE MILLIMETERS AND FOR REF. ONLY

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
<b>PARTS LIST</b>				
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF		
TOLERANCES		<b>ARGONNE NATIONAL LABORATORY</b>		
DECIMALS		<b>ADVANCED PHOTON SOURCE</b>		
ANGULAR		V1 APS FRONT END		
.X ± .03 [.7620]		14 mm X 78 mm X 182 mm		
.XX ± .01 [0.25]		DIFFERENTIAL TUBE FLANGE		
.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				
LOG NUMBER <b>A1433900</b>		<b>ARGONNE NATIONAL LABORATORY</b>		
DRAWN BY <b>MUSCIA</b>		DATE <b>10/22/93</b>	CHIEF DESIGN ENGINEER <b>D. SHU</b>	DATE <b>11/15/93</b>
CHECKED BY <b>J. WOTHE</b>		DATE <b>11/15/93</b>	GP LEADER <b>J. M. KUZAY</b>	DATE <b>11/15/93</b>
DESIGNER <b>SHU/MUSCIA</b>		DATE <b>10/22/93</b>	PROJECT MGR.	
RESPONSIBLE ENGINEER <b>D. SHU</b>		DATE <b>11/15/93</b>	APPROVED/RELEASED	
MATERIAL <b>304 STAINLESS STEEL</b>		SCALE <b>HALF</b>	SIZE <b>B</b>	DRAWING NUMBER <b>P4105090701-830102-00</b>
SYM		SHEET <b>1 of 1</b>		
CHANGE DESCRIPTION				
REVISIONS				
BY	CHKD	DATE		

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				