



NOTES:

1. THE PART NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING AND DRY NITROGEN BLOW DOWN BEFORE WELDING.
2. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
3. ALL DIMENSIONS WITH ARE MILLIMETERS

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER <b>P4410102-00</b>	THIS DRAWING IS THE PROPERTY OF <b>ARGONNE NATIONAL LABORATORY</b>	
TOLERANCES				
DECIMALS	ANGULAR			
.X - .03	- .25			
.XX - .01				
.XXX - .005				
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 <b>MUSCIA</b>		DATE <b>7/15/99</b>	CHIEF DESIGN ENGINEER <b>D.SHU</b>	DATE <b>12/18/99</b>
CHECKED BY <b>J.CHANG</b>		DATE <b>12/9/99</b>	GP LEADER <b>T.M.KUZAY</b>	TITLE <b>ADVANCED PHOTON SOURCE P4-40 INTEGRAL SHUTTERS FOR 4-ID-B INNER COOLING TUBE</b>
DESIGNER <b>CHANG/MUSCIA</b>		DATE <b>7/15/99</b>	PROJECT MGR.	
RESPONSIBLE ENGINEER <b>J.CHANG</b>		DATE <b>12/9/99</b>	APPROVED/RELEASED	
MATERIAL <b>OFHC COPPER</b>		SCALE <b>1:1</b>	SIZE <b>C</b>	DRAWING NUMBER <b>P4-410102-00</b>
		SHEET <b>1 of 1</b>		