



NOTES:

1. TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER OF NICKEL AND IRON MIL-T-210140, CLASS3, UHV GRADE
2. THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
3. 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
4. FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
5. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1×10^{-9} TORR CAN BE ACHIEVED
6. HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
7. SURFACE ROUGHNESS $63 \sqrt{\quad}$
8. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

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 P8810001-00		
TOLERANCES		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY		
DECIMALS	ANGULAR	ADVANCED PHOTON SOURCE P8-81 MONO SHUTTER FOR 5-BM 1 ST SHIELD		
.X - .1 [2.5]	- '030'			
.XX - .01 [0.25]				
.XXX - .005 [0.13]				
SURFACE ROUGHNESS $125 \sqrt{\quad}$		DRAWN BY MUSCIA DATE 5/17/00 CHIEF DESIGN ENGINEER D. SHU		
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.		CHECKED BY J. CHANG DATE 5/17/00 GP LEADER P. DEN HARTOG		
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1		DESIGNER CHANG/MUSCIA DATE 5/17/00 PROJECT MGR.		
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		RESPONSIBLE ENGINEER J. CHANG DATE APPROVED/RELEASED		
MATERIAL SEE NOTE #1		SCALE 1:1		
DO NOT SCALE DRAWING		SIZE C		
		DRAWING NUMBER P8-810001-00		
		SHEET 1 of 1		