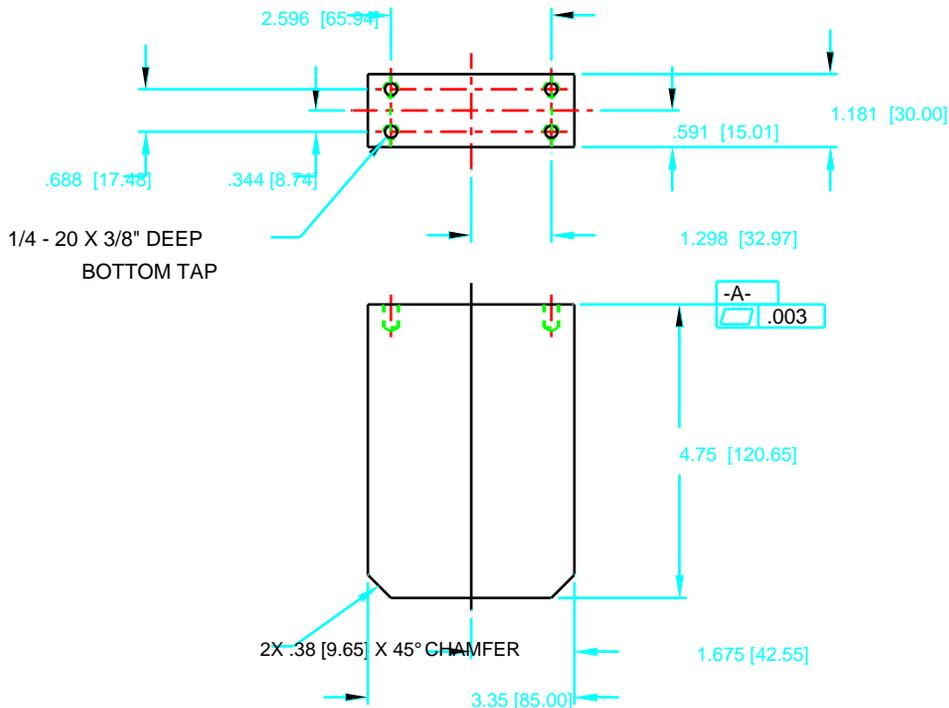


REF. SOURCE

▽ KULITE TUNGSTEN CORP.
 160 EAST UNION AVENUE
 EAST RUTHERFORD, NJ 07073
 TEL: 1-210-438-9000
 FAX: 1-210-438-0891

OR

MITEK METALS INC.
 1340 NORTH SENATE AVENUE
 INDIANAPOLIS, IN 46202
 TEL: 1-317-637-3574
 FAX: 1-633-7224



NOTES:

- THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
- WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - CIMCOOL 5 STAR 49
 - TRIM SOL
- ALL SURFACES MUST BE MACHINED FOR CLEAN UP
- TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER OF NICKEL AND IRON PER MIL-T-210140, CLASS 3, UHV GRADE
- FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
- CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1 X 10⁻⁹ TORR CAN BE ACHIEVED
- HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
- BREAK ALL SHARP CORNERS .01
- DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY
- SURFACE ROUGHNESS \checkmark 63

SYN	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	THIS DRAWING IS THE PROPERTY OF	
TOLERANCES DECIMALS ANGULAR .X ± .1 [2.5] ± 0°30' .XX ± .01 [0.25] .XXX ± .005 [0.13]		A3710005-00	ARGONNE NATIONAL LABORATORY	
SURFACE ROUGHNESS \checkmark 125		DRAWN BY	CHIEF DESIGN ENGINEER	DATE
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.		MUSCIA	D. SHU	5/19/00
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46		CHECKED BY	GP LEADER	DATE
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		J. CHANG	P. DEN HARTOG	
DO NOT SCALE DRAWING		DESIGNER	PROJECT MGR.	DATE
		CHANG/MUSCIA		5/19/00
		RESPONSIBLE ENGINEER	APPROVED/RELEASED	DATE
		J. CHANG		
		MATERIAL	SCALE	SIZE
		SEE NOTE #4	HALF	B
			SHEET 1 of 1	DRAWING NUMBER
				A3-710005-00

ADVANCED PHOTON SOURCE
 A3-71 LIGHT LOAD
 PNEUMATIC ACTUATOR
 TUNGSTEN SHUTTER