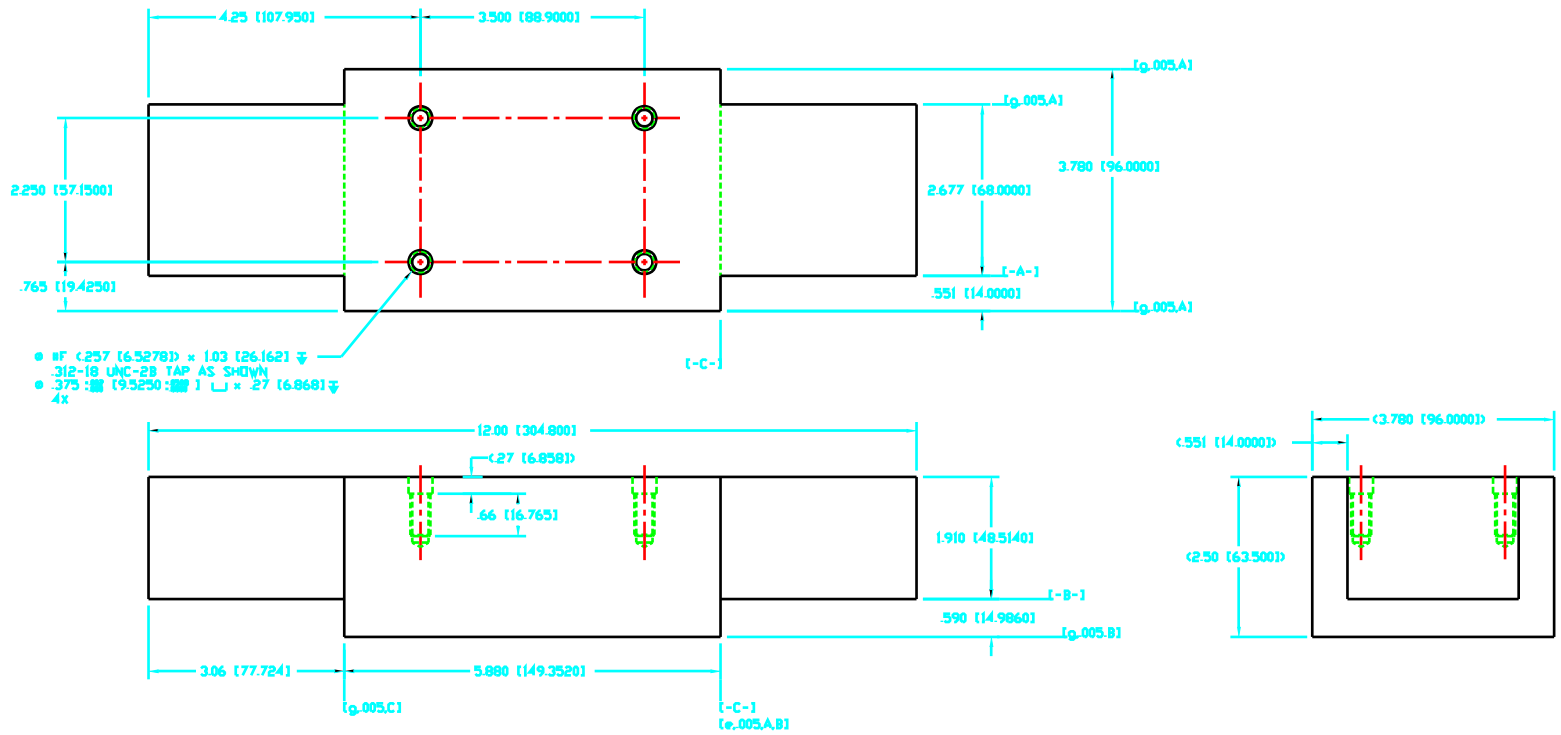

NOTES:

1. THIS IS A ULTRA-HIGH VACUUM COMPONENT (UHV).
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. ALL SURFACES MUST BE MACHINED FOR CLEAN UP.
4. TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER NICKEL AND IRON.
   TO COMPLY WITH MIL. SPEC. T-21014D, CLASS 4
5. FINISHING: WHEN MACHINING VACUUM PARTS, USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED.
6. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1 x 10^{-9} TORR CAN BE ACHIEVED.
7. HANDLING: CLEAN COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM-FOIL-TYPE DRY ANNEAL A UNDER CLEAN ROOM CONDITIONS.
8. BREAK ALL SHARP CORNERS .02.
9. ALL DIMENSIONS IN [ ] ARE MILLIMETERS AND ARE FOR REFERENCE ONLY.

ITEM	DWG & ELECTRONIC FILE NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY

PARTS LIST

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ANGULAR
.X ± .005 ± .25°
.XX ± .010
.XXX ± .005
SURFACE ROUGHNESS 63
REMOVE ALL BURRS AND BREAK SHARP EDGES TO MIN.
SURFACE TREATMENT IN ACCORDANCE WITH LATEST ANSI Y14.5
ALL DIMENSIONS & TOLERANCES IN ACCORDANCE WITH LATEST ANSI Y14.5

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE

REVISIONS

DO NOT SCALE DRAWING

ELECTRONIC FILE NUMBER: A08707

THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY

DRAWN BY: RICK KRAKORA	DATE: 12/93	CHIEF DESIGN ENGINEER: D.SHU	DATE: 8/9/93
CHECKED BY: T. SANCHEZ	DATE: 7/26/93	OP LEADER: T. KUZAY	DATE: 8/9/93
DESIGNER: RICK KRAKORA	DATE: 12/92	PROJECT MGR:	DATE:
RESPONSIBLE ENGINEER: T. SANCHEZ	DATE: 7/26/93	APPROVED/RELEASED	DATE:

TITLE: ADVANCED PHOTON SOURCE
S1 I.D. SAFETY SHUTTER
TUNGSTEN BLOCK
PLUG

MATERIAL: SEE NOTE 4

SCALE: 1=1
SHEET: 1 of 1
SIZE: D

DRAWING NUMBER: P4102010108-230001-00

PLOT SCALE:1=1