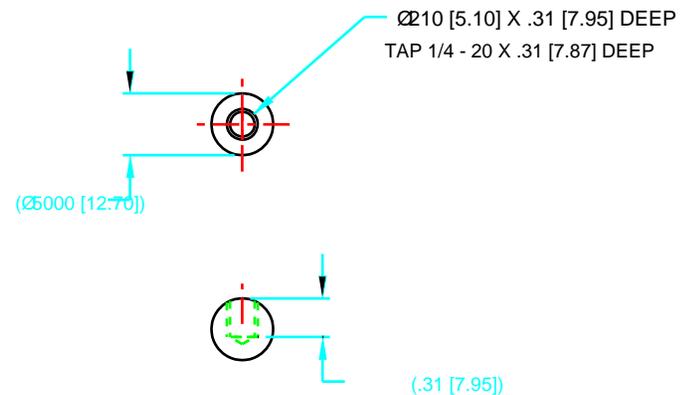


NOTES:

1. MAKE FROM BERG'S Ø6000 SST BALL
CAT. #PT4 - 16
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. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY
8. DIMENSIONS IN () ARE FOR REF. ONLY



1 WINFRED M. BERG, INC.
499 OCEAN AVE.
EAST ROCKAWAY, NY 11518
TEL: 516-596-1700
FAX: 516-599-3274

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY																							
PARTS LIST																											
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		LOG NUMBER V3320008-00	THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY																								
<p>TOLERANCES</p> <table border="0"> <tr> <td>DECIMALS</td> <td>ANGULAR</td> </tr> <tr> <td>.X - .1 [2.5]</td> <td>- 0°30'</td> </tr> <tr> <td>.XX - .01 [0.25]</td> <td></td> </tr> <tr> <td>.XXX - .005 [0.13]</td> <td></td> </tr> </table> <p>SURFACE ROUGHNESS 125 ✓</p> <p>REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.</p> <p>SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1</p> <p>DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5</p>		DECIMALS	ANGULAR	.X - .1 [2.5]	- 0°30'	.XX - .01 [0.25]		.XXX - .005 [0.13]		<table border="1"> <tr> <td>DRAWN BY MUSCIA</td> <td>DATE 6/20/00</td> <td>CHIEF DESIGN ENGINEER D. SHU</td> <td>DATE 7/27/00</td> </tr> <tr> <td>CHECKED BY J. CHANG/J. LANG</td> <td>DATE 7/27/00</td> <td>GP LEADER P. DEN HARTOG</td> <td>DATE 8/10/00</td> </tr> <tr> <td>DESIGNER CHANG/MUSCIA</td> <td>DATE 6/20/00</td> <td>PROJECT MGR. G. SRAGER</td> <td>DATE</td> </tr> <tr> <td>RESPONSIBLE ENGINEER J. CHANG</td> <td>DATE 7/27/00</td> <td>APPROVED/RELEASED</td> <td>DATE</td> </tr> </table>	DRAWN BY MUSCIA	DATE 6/20/00	CHIEF DESIGN ENGINEER D. SHU	DATE 7/27/00	CHECKED BY J. CHANG/J. LANG	DATE 7/27/00	GP LEADER P. DEN HARTOG	DATE 8/10/00	DESIGNER CHANG/MUSCIA	DATE 6/20/00	PROJECT MGR. G. SRAGER	DATE	RESPONSIBLE ENGINEER J. CHANG	DATE 7/27/00	APPROVED/RELEASED	DATE	<p>TITLE ADVANCED PHOTON SOURCE V3-32 PHASE RETARDER FOR 4-ID-B ADJUSTMENT BALL</p>
DECIMALS	ANGULAR																										
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MATERIAL SEE NOTE #1		SCALE 1:1	SIZE B	DRAWING NUMBER V3-320008-00																							
DO NOT SCALE DRAWING		SHEET 14																									

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				