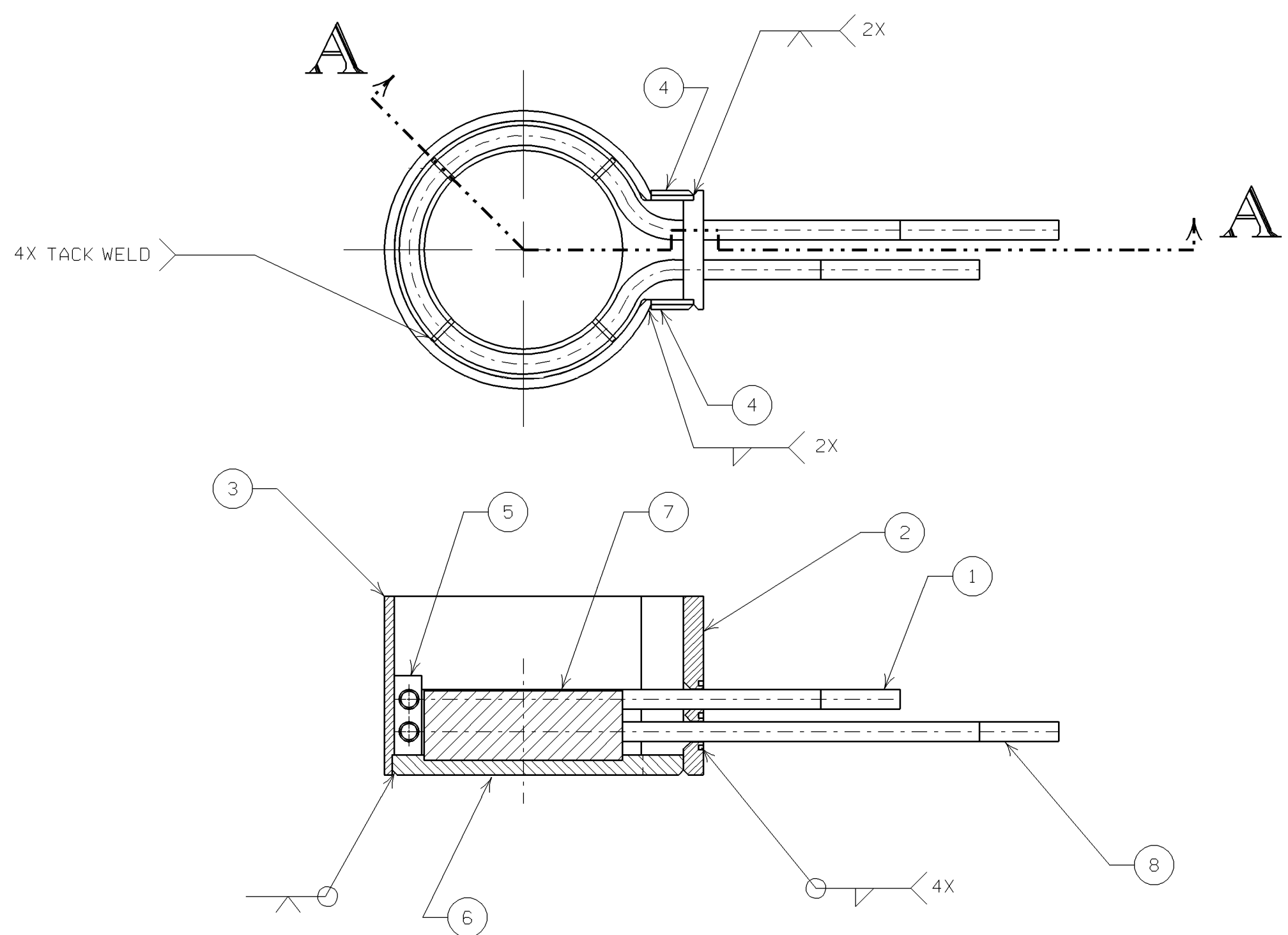


REV	DESCRIPTION	DRN	CHK	APP	DATE
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SECTION A-A

ASSEMBLY NOTES:

- ASSEMBLE COOLING TUBES (ITEMS 1 & 8) WITH TUBE FEEDTHRU PLATE (ITEM 2)
- PLACE TARGET PLUG (ITEM 7) ON BOTTOM PLATE (ITEM 6), THEN POSITION ITEMS 1, 8, AND 2 AROUND ITEM 7. USE COOLING TUBE RETAINERS (ITEM 5) LOCATED AS SHOWN, TACK WELD RETAINERS TO ITEM 6
- ASSEMBLE STAINLESS CAN (ITEM 3) AROUND ITEMS 1,6,7, AND 8. TACK WELD COOLING TUBE RETAINERS (ITEM 5) TO CAN (ITEM 3) AT TOP AND BOTTOM.
- ASSEMBLE TRANSITION PIECES (ITEM 4) ON BOTH SIDES BETWEEN ITEMS 2,3, AND 6, THEN WELD ALL SEAMS AS INDICATED.
- CLEAN FIRE WELDED ASSEMBLY AT 1000° FOR 15 MINUTES.
- FILL TARGET CAN WITH 4.5 CU IN OF STERLING SILVER (ITEM 9) AND FIRE AT 1000° MINIMUM IN A HYDROGEN FURNACE. HOLD FOR A MINIMUM OF 10-20 MINS AT 970° MIN TEMP, THEN COOL SLOWLY

ITEM NO	PREF	BASE	SUFF	TITLE OR DESCRIPTION	QTY
9				STERLING SILVER	AR
8	PF	234-058	66	BOTTOM COOLING TUBE	1
7	PF	234-058	65	W-25R <sub>e</sub> TARGET PLUG	1
6	PF	234-058	64	BOTTOM PLATE	1
5	PF	234-058	68	TUBE RETAINER	4
4	PF	234-058	63	TRANSITION PLATE	2
3	PF	234-058	62	STAINLESS CAN	1
2	PF	234-058	61	TUBE FEEDTHRU PLATE	1
1	PF	234-058	67	TOP COOLING TUBE	1

**ULTRA HIGH VAC PART**  
FABRICATE PER FP-202-631-14

DIMENSIONING AND TOLERANCING IS IN ACCORDANCE WITH ANSI Y14.5M-1982.

SCALE: FULL DO NOT SCALE DRAWING NEXT ASSEMBLY: SA-234-058-71

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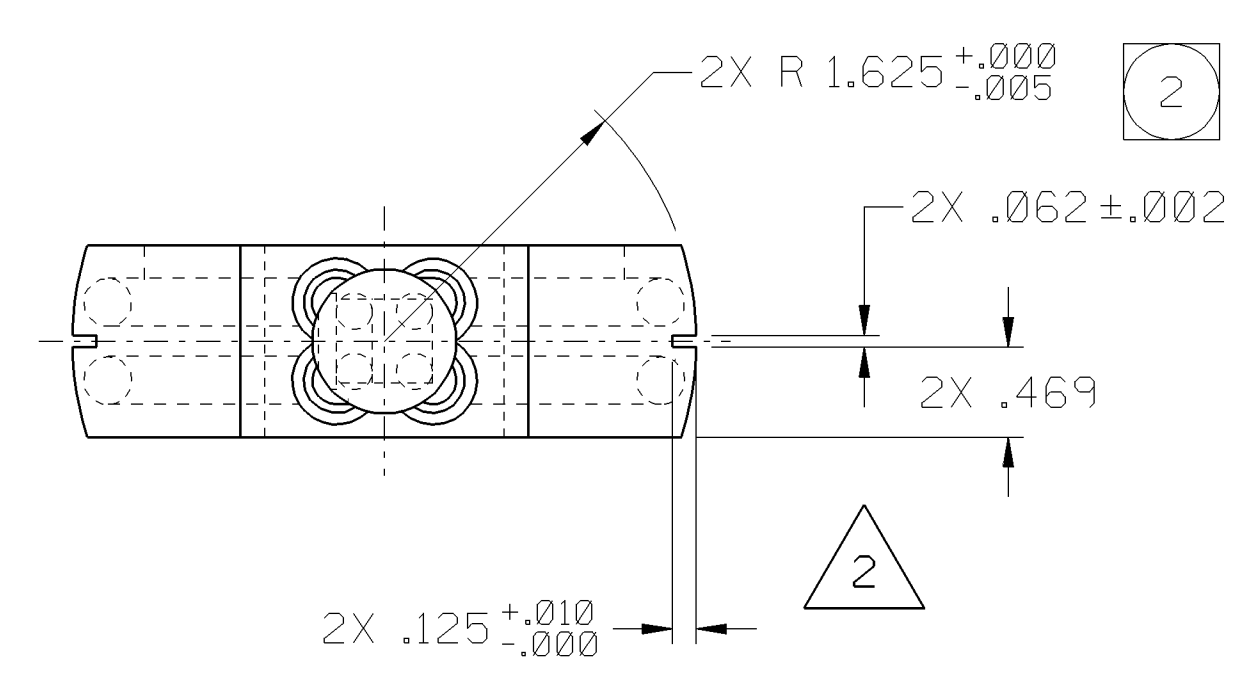
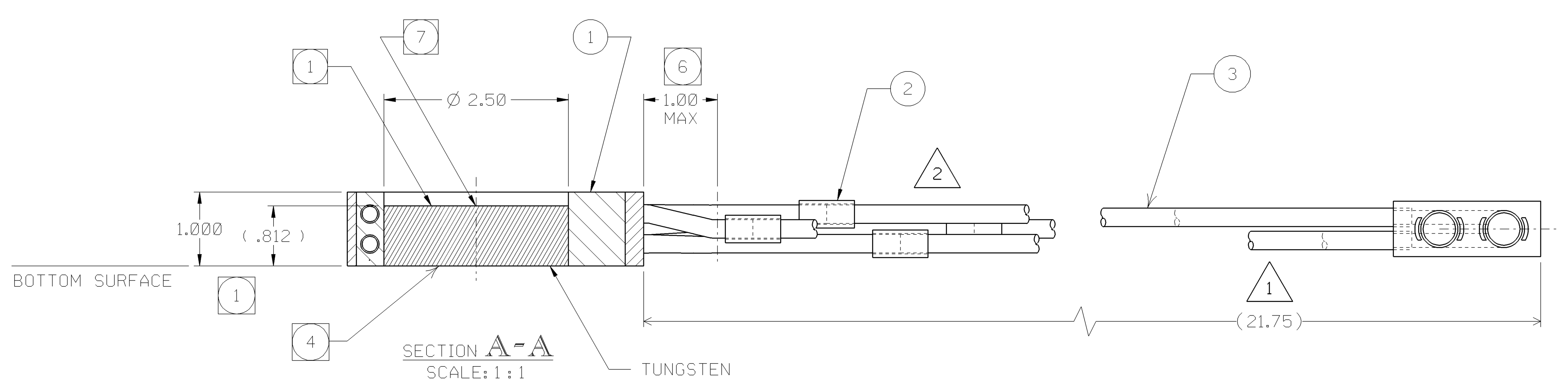
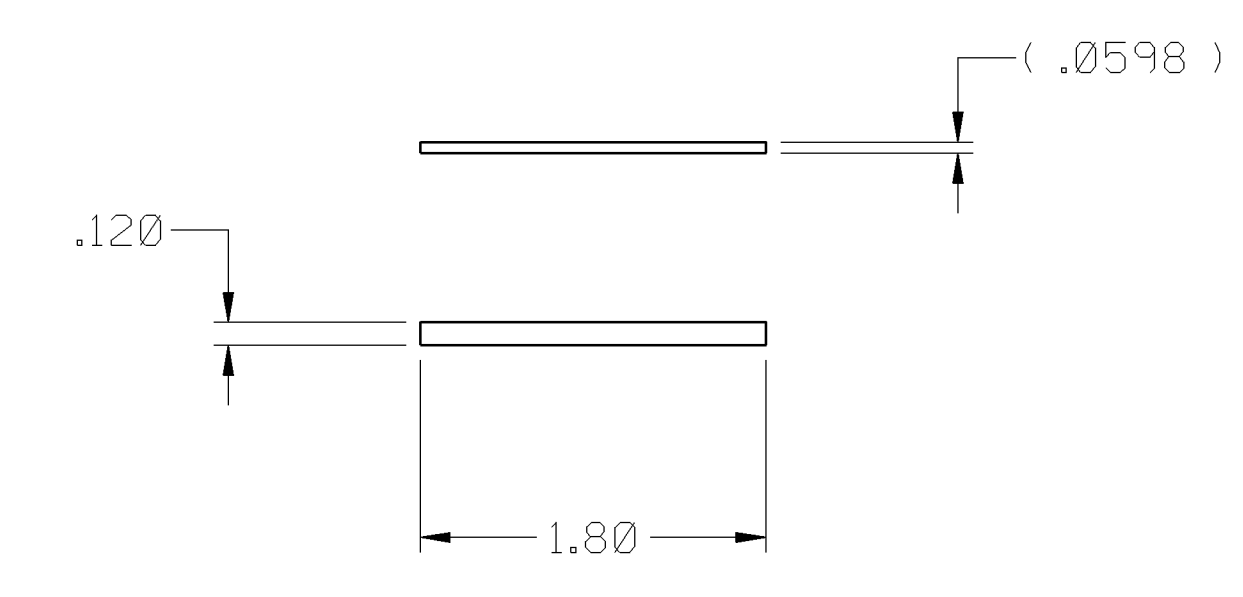
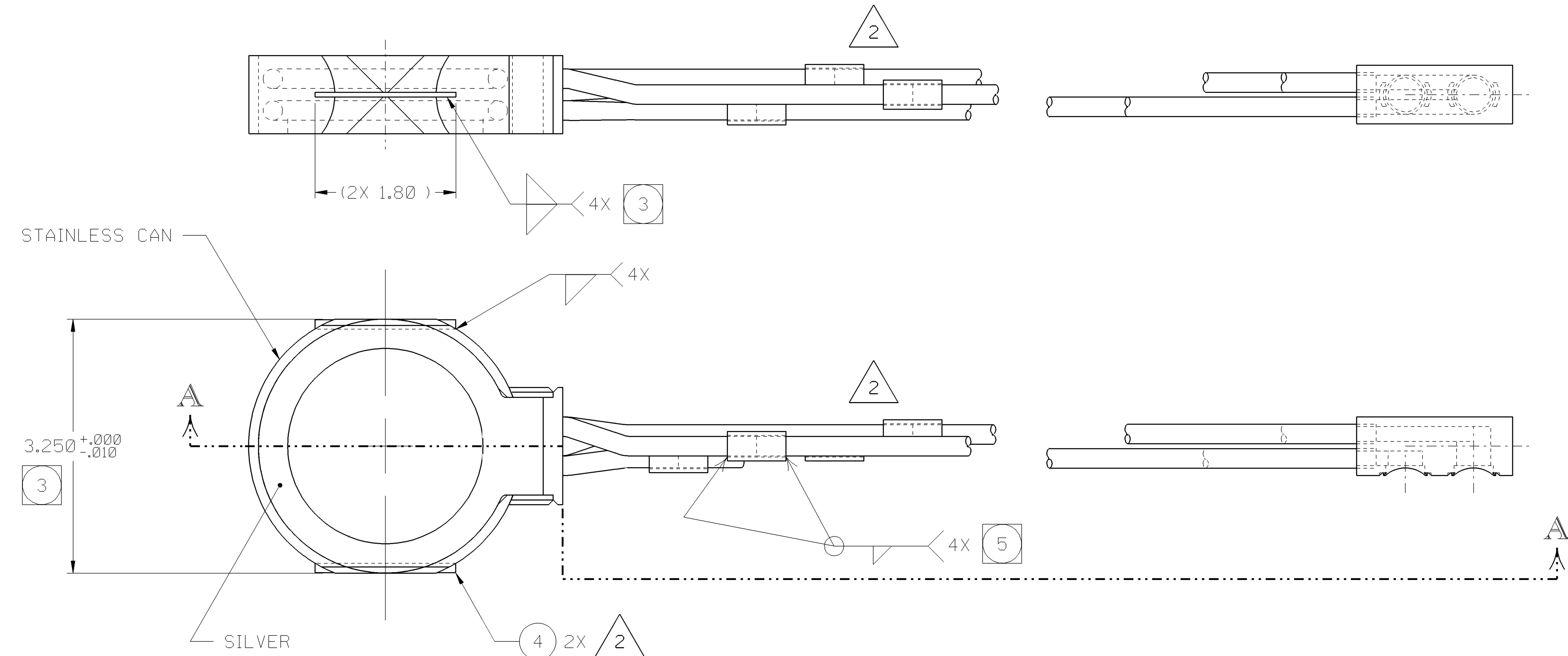
ENGR D. MANSOUR DATE  
DRWN M.J. MYERS 1-23-89 APPROVALS BEN SMITH E. REUTER A. LISIN  
CHKD D. MANSOUR

**POSITRON SOURCE HIGH POWER TARGET WELDMENT**

SA-234-058-70 E0 D

POS SCE H PWR TGT WELDMENT

REV	DESCRIPTION	DRN	CHK	APP	DATE
1	ITEM 3 WAS 95-460-001-04	RBR			02MAY 1989
2	ADDED CLEARANCE TRIMMING, NOTCH, & ITEM-4; INSERTED NOTES 2 & 3 AND RENUMBERED; REVERSED SEQ OF MACHINING AND GRINDING IN NOTE 1; ITEM-2 LOCATIONS ON LOWER TUBES REVERSED TO MATCH ITEM-1 CØ AND ITEM-3 E2. REVISED NOTE 7 FOR LATER TARGET NUMBERS.	RBR	JF		27APR 1994



ASSEMBLY NOTES:

- 1 GRIND THE BOTTOM SURFACE OF ITEM-1 TO REMOVE THE STAINLESS PLATE AND SOME OF THE TUNGSTEN TARGET PLUG JUST ENOUGH SO THAT A CLEAN RING OF SILVER IS EXPOSED BETWEEN THE TUNGSTEN AND THE STAINLESS CAN. MACHINE OFF THE TOP OF THE STAINLESS CAN (AND SILVER) TO THE 1.000 DIMENSION. THEN BORE THE SILVER DOWN TO CLEARLY EXPOSE THE TUNGSTEN.
- 2 MACHINE RADII AND NOTCHES AS SHOWN IN END VIEW.
- 3 WELD ENDS OF ITEM-4 (DETAIL B) TO STAINLESS CAN ONLY OF ITEM-1. GRIND WELDS FLUSH SO AS TO STAY WITHIN THE 3.250 DIMENSION.
- 4 MICROPOLISH FACE AND MICROGRAPH PRIOR TO PERFORMING STEP 5.
- 5 WELD ITEM 2 TO ITEMS 1 & 3 BEFORE BENDING AND AFTER ITEM 1 HAS BEEN MACHINED
- 6 BEND TUBING WITHIN ONE INCH OF THE TARGET CAN. A .75 INCH I.D. PIPE SHOULD FIT OVER ALL FOUR TUBES AND SLEEVES, BEYOND THE ONE INCH.
- 7 VIBROETCH TARGET NUMBER (1 THROUGH 4) IN .18 HIGH CHARACTERS INTO UPSTREAM FACE OF TARGET IN THE CENTER. STAY WITHIN A 1/2" RADIUS FROM THE CENTER. TARGET NUMBER 5 AND ABOVE FABRICATED AFTER DATE OF THIS DRAWING REVISION 2.

ITEM NO	PREF	BASE	SUFF	TITLE OR DESCRIPTION	QTY
4	95	400-003	26	SHEET, SST304, 16 GA (.0598)	AR
3	SA	234-058	60	TUBE TRANSITION BRAZEMENT	1
2	PF	234-058	73	SLEEVE	4
1	SA	234-058	70	WELDMENT	1

DIMENSIONING AND TOLERANCING IS IN ACCORDANCE WITH ANSI Y14.5M-1982.  
 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.  
 TOLERANCES:  
 BREAK EDGES .005-.015  
 INTERNAL CORNERS .015 R MAX  
 FRACTIONS ±  
 DEC .x ±  
 .xx ± .02  
 .xxx ± .005  
 ANGLES ± ALL SURFS ✓

**SCALE: FULL**  
 DO NOT SCALE DRAWING  
 NEXT ASSEMBLY: SA-234-058-06

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ENGR D. MANSOUR DATE  
 DRWN M.J. MYERS 1-23-89  
 CHKD D. MANSOUR 1-25-89

APPROVALS  
 BEN SMITH 1/27/89  
 E. REUTER 1/26/89

**POSITRON SOURCE  
 HIGH POWER TARGET  
 MACHINING**

**SA-234-058-71 E2 D**

SH 1 OF 1  
 POS\_SCE\_HIGH\_PWR\_TGT\_MACHINING

**ULTRA HIGH  
 VAC PART**  
 FABRICATE PER  
 FP-202-631-14