



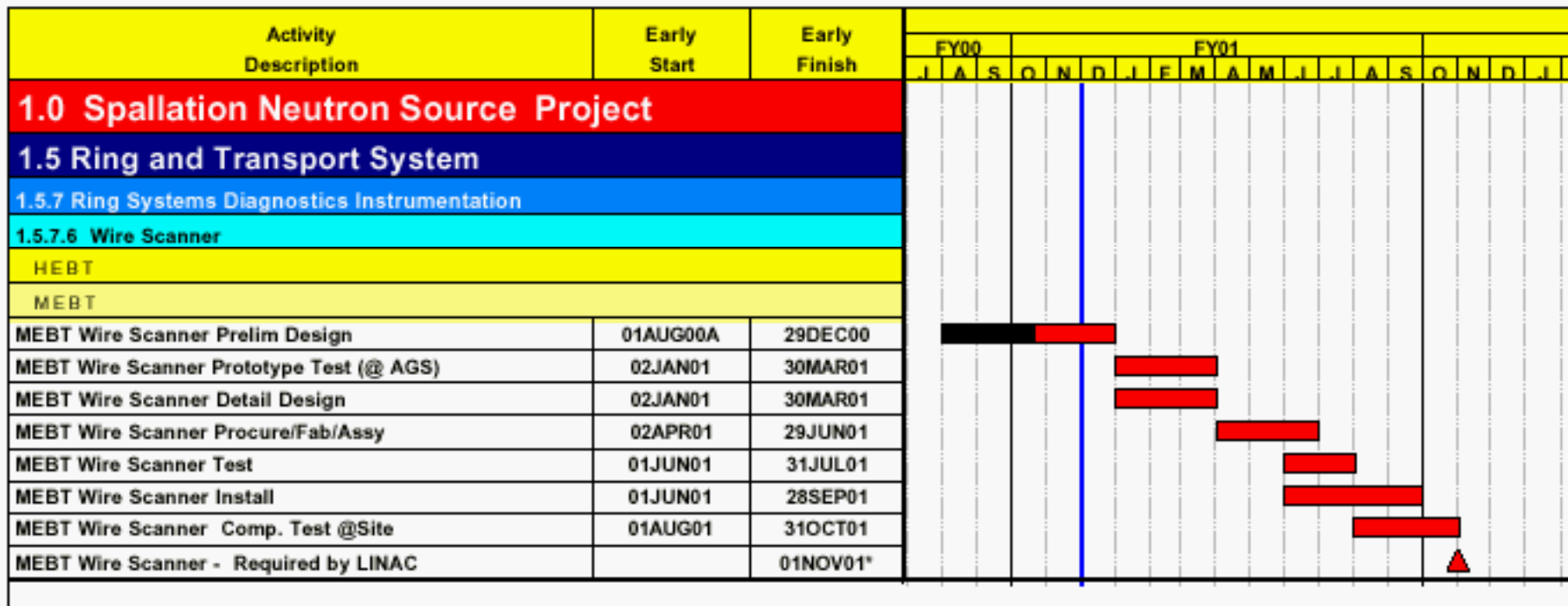
MEBT MEETING AGENDA

December 20, 2000

1. **Electrical Systems Update** Alex/Bill
2. **Cable Routing** Alex/Bill
3. **Profile Monitor Update** Daryl/Alex
Alex/Larry
 - Diagnostics Review
 - **Schedule, Layout, Interface DWG**
4. **BPM Fabricaton** Daryl
 - Contract awarded to Humboldt (**DWG**)
 - Prototype machining complete by 12/21/00
5. **Chopper Beam Box Update (**DWG**)** Andrew
6. **Chopper Target Fabrication Update (**DWG**)** Allan
7. **Slit/Beamstop **FEA** Status** Daryl
8. **Upcoming Tasks and Milestones**
 - ◆ Raft Systems FDR 1/31/01 **OR,UC**
 - ◆ Rebuncher Cavity #1 Received 1/31/01 **OR**
 - ◆ Profile Monitor FDR 1/31/01
 - ◆ Profile Monitor First Article Complete 3/1/01
 - ◆ Chopper Target Complete 4/30/01
 - ◆ Chopper Vacuum Enclosures Complete 5/31/01
 - ◆ Raft and Support Structure Complete 5/31/01 **OR**
 - ◆ Profile Monitor all complete 7/31/01

Next Meeting, Thursday, 1/4/01, 10 AM

MEBT Wire Schedule

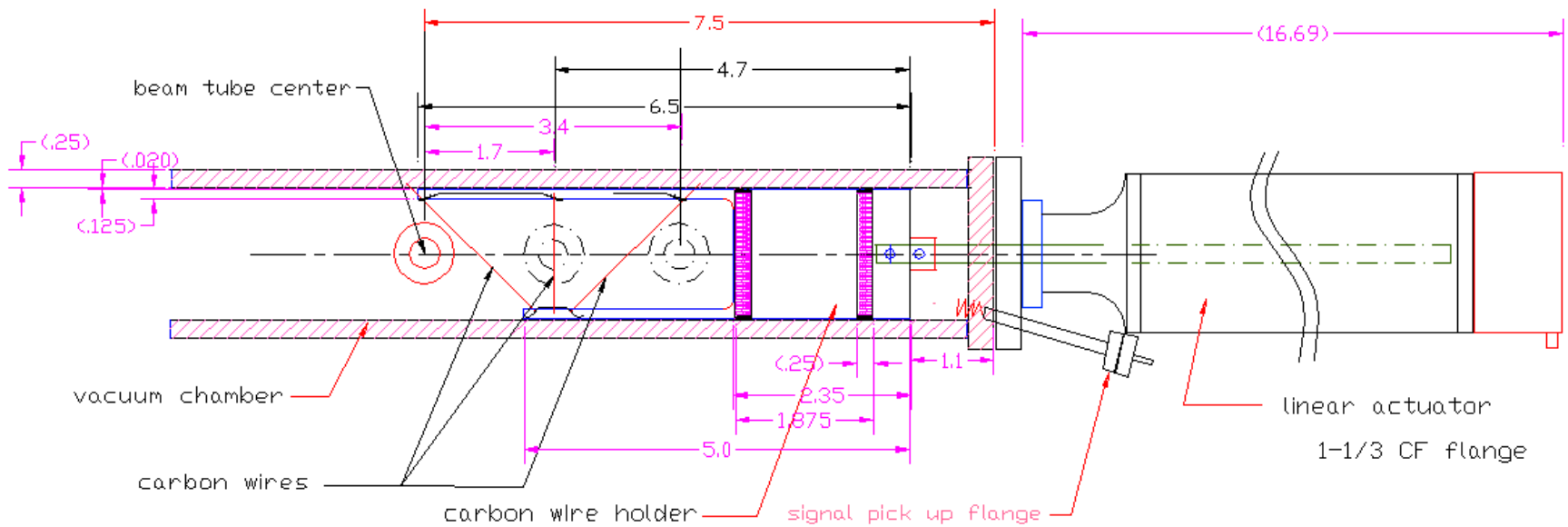


MEBT Wire Scanner



MBET Wire Scanner at Full Retract Position

12/8/2000

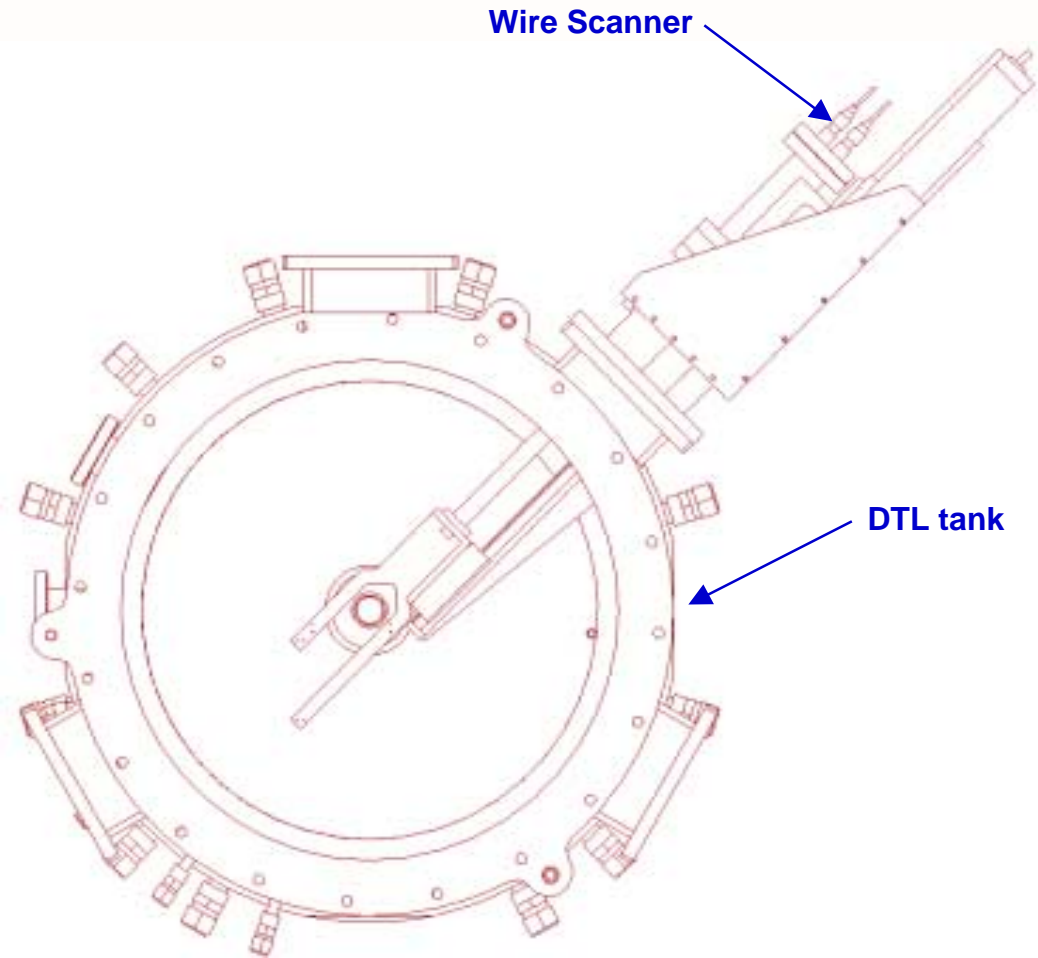


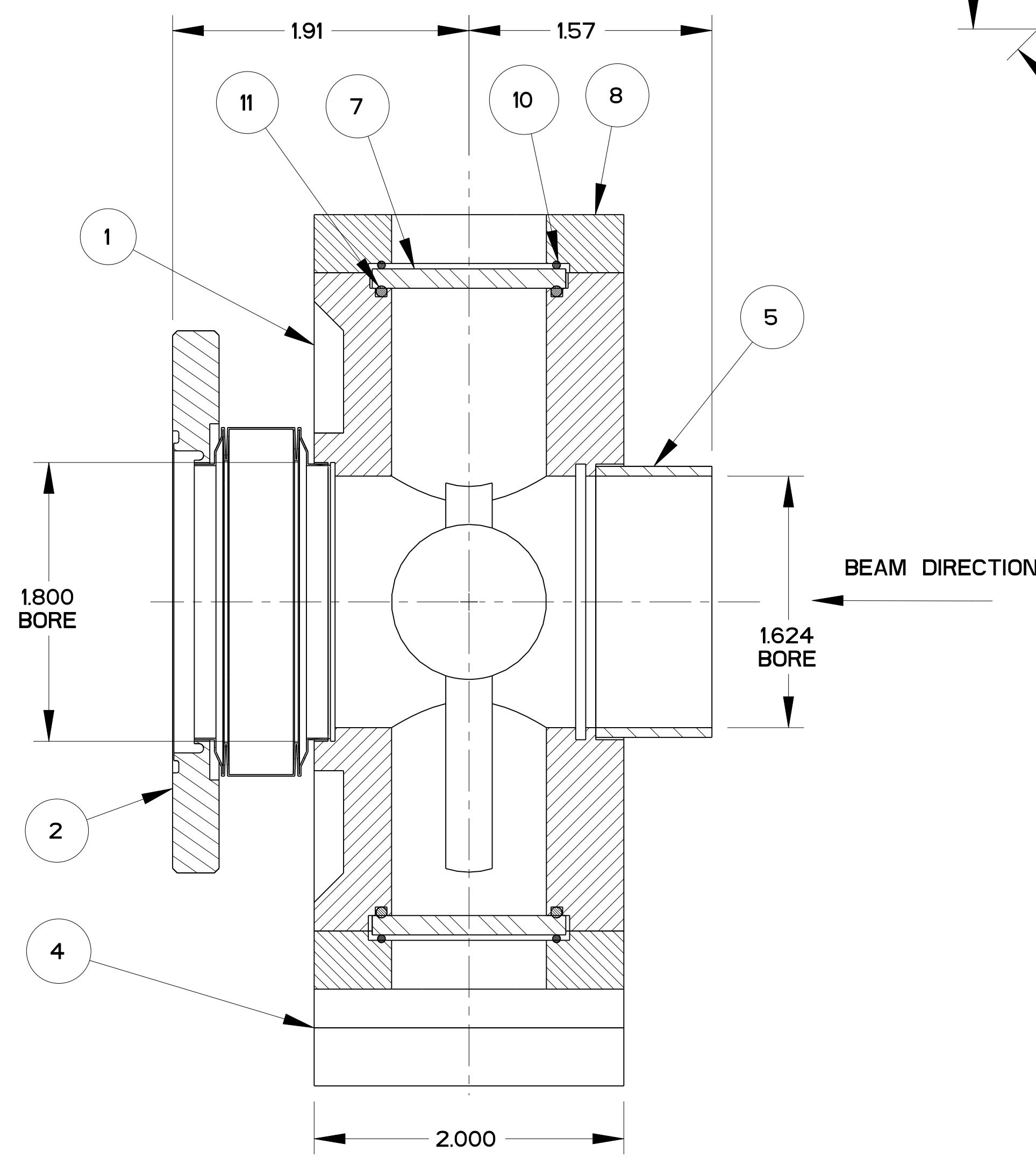
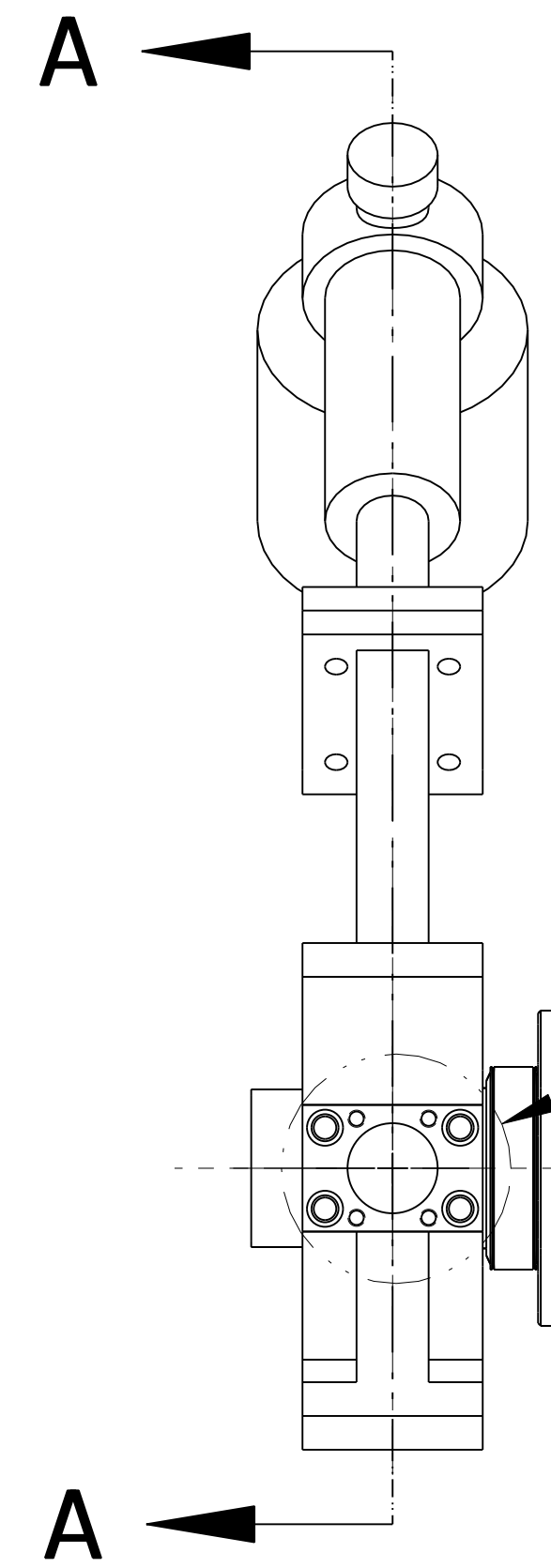
mebt128

DTL Wire Scanner

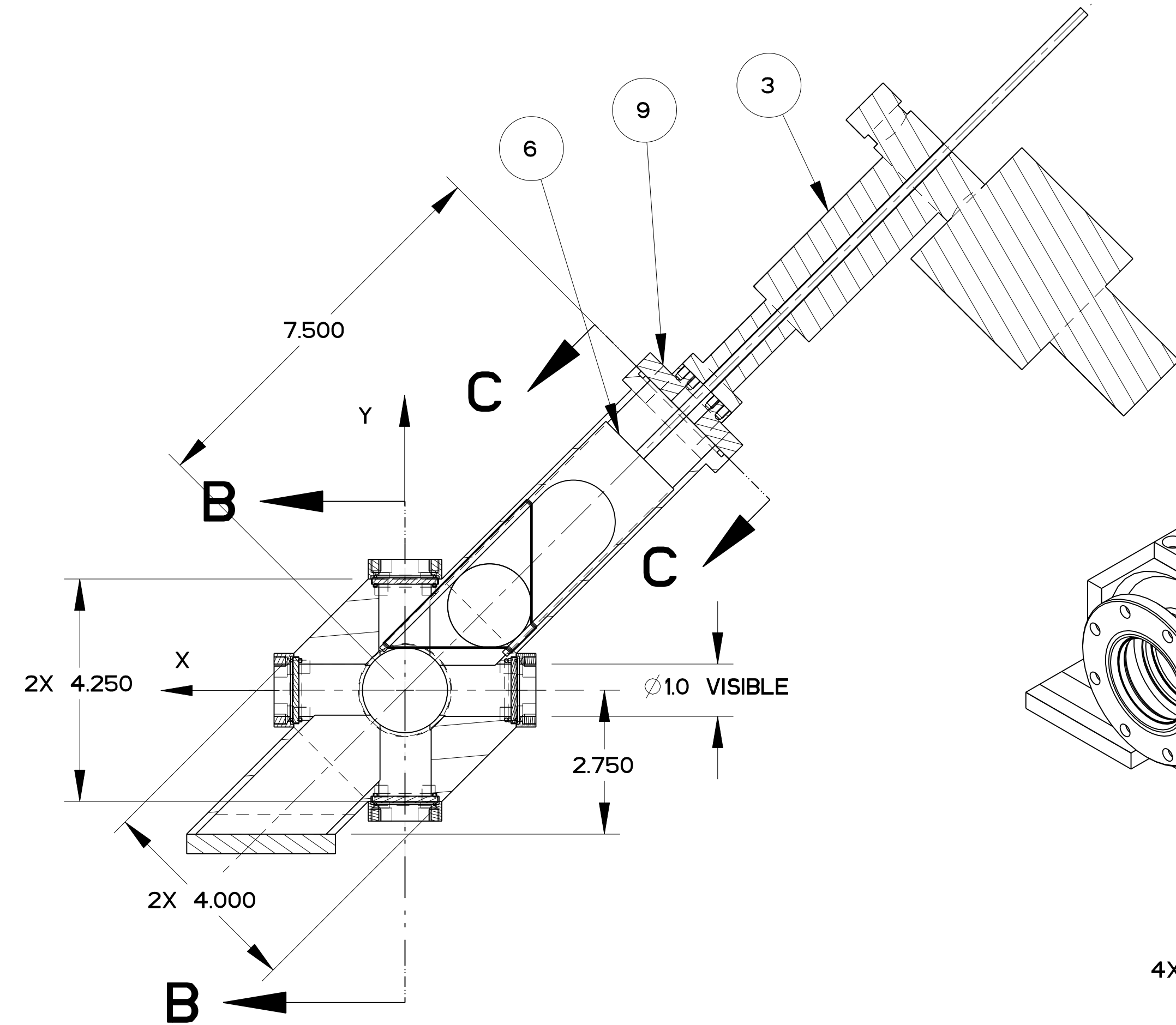


- “O” ring seal to DTL spool
- Occupies 1.75” of z length within inter-tank region

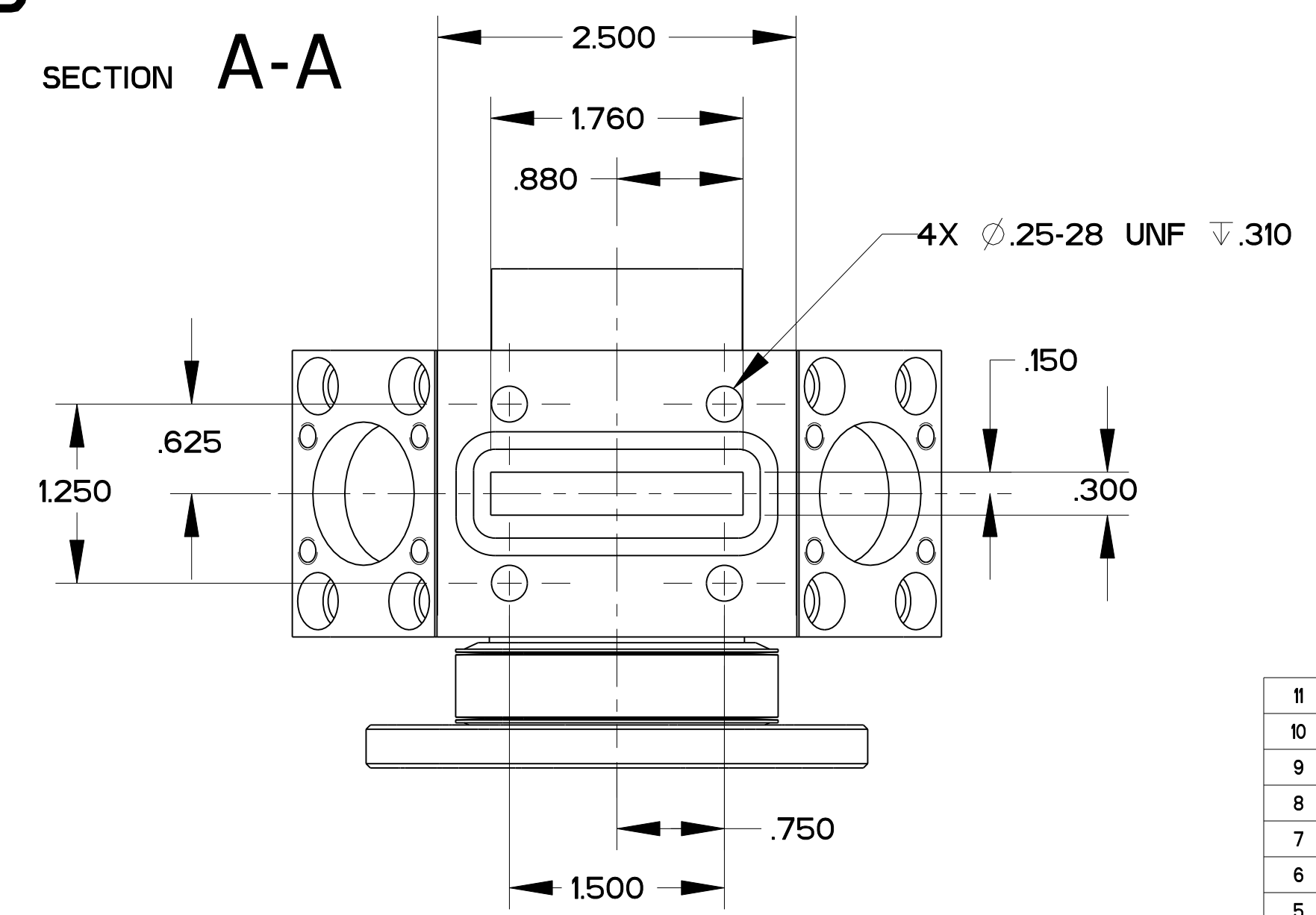




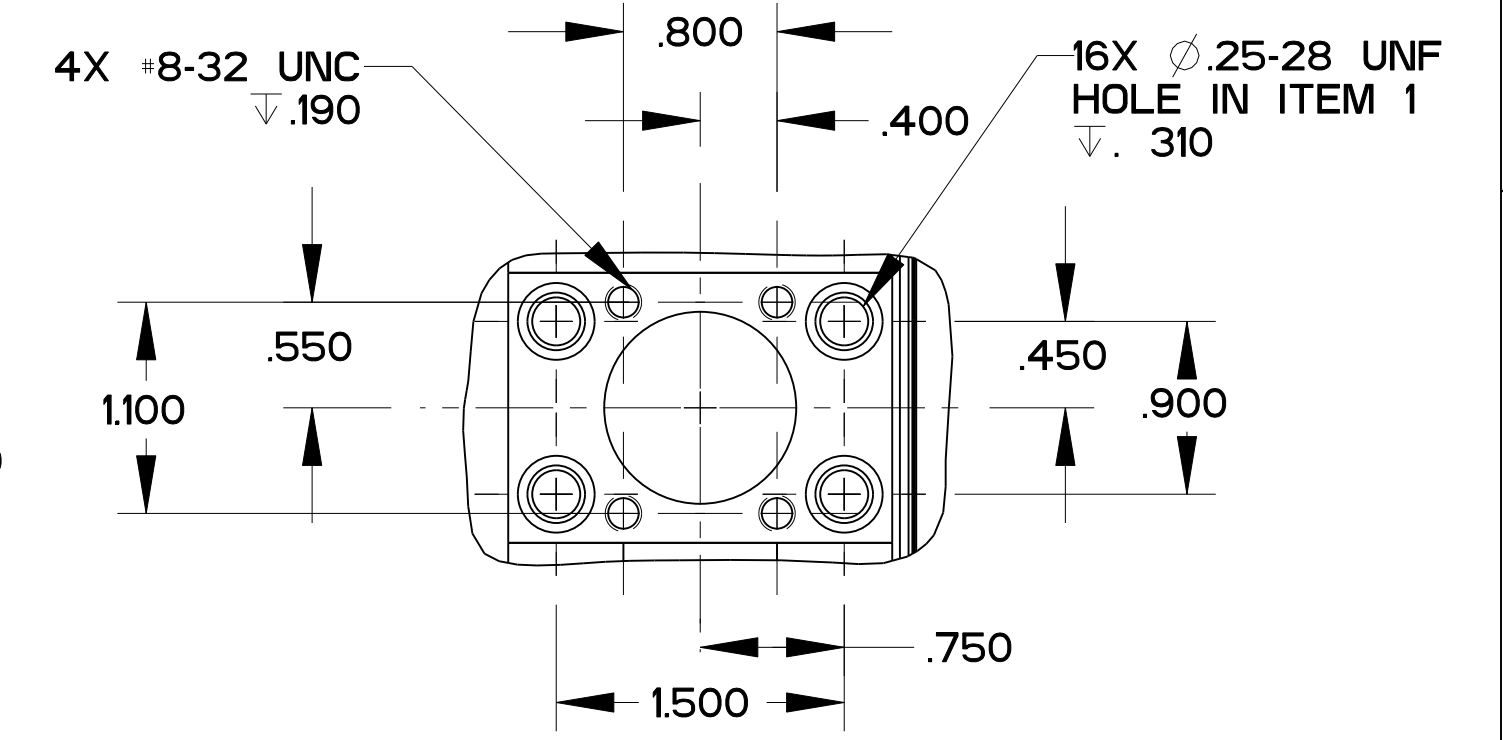
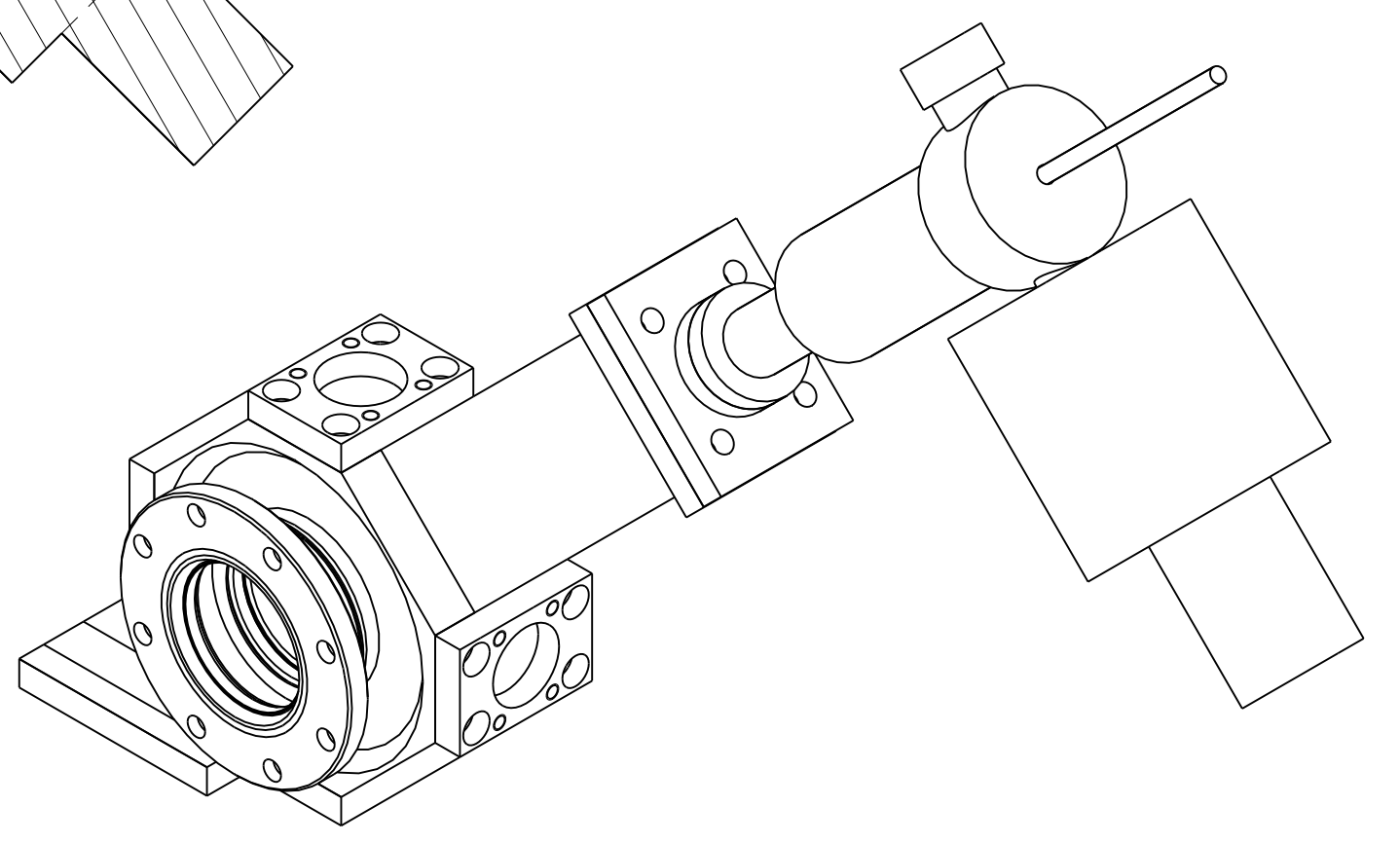
SECTION B-B
SCALE 3/2



SECTION A-A



SECTION C-C
SCALE 1/1



DETAIL D
SCALE 1/1

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
11	nnXnnn	4	VIEWPORT VACUUM O-RING	-
10	nnXnnn	4	VIEWPORT COMPRESSION O-RING	-
9	nnXnnn	1	WIRE SCANNER FLANGE	-
8	nnXnnn	4	VIEWPORT FLANGE	-
7	nnXnnn	4	VIEWPORT WINDOW (125 DIA)	-
6	nnXnnn	1	WIRE SCANNER ASSY.	-
5	nnXnnn	1	BEAM TUBE (175 DIA X 1/16 WALL)	-
4	nnXnnn	1	BOTTOM CAP FLANGE	-
3	nnXnnn	1	BELLOWS SEALED ACTUATOR	-
2	nnXnnn	1	FLEXIBLE BELLOWS ASSY	-
1	nnXnnn	1	PROFILE MONITOR BEAM BOX	-

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED
 PROJECTION:
 TOLERANCES: XX ± 0.1 FRAC ± 1/84
 XXX ± 0.03 Angles ± 10°
 XXXX ± 0.010 FINISH 125
 DO NOT SCALE PRINT
 THREADS ARE CLASS 2
 CHAMFER ENDS OF ALL SCREW THREADS 30°
 CUT ROUND, 15 THREAD RELIEF ON MACHINED THREADS
 BREAK EDGES .016 MAX. ON MACHINED WORK
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

SHOP ORDERS

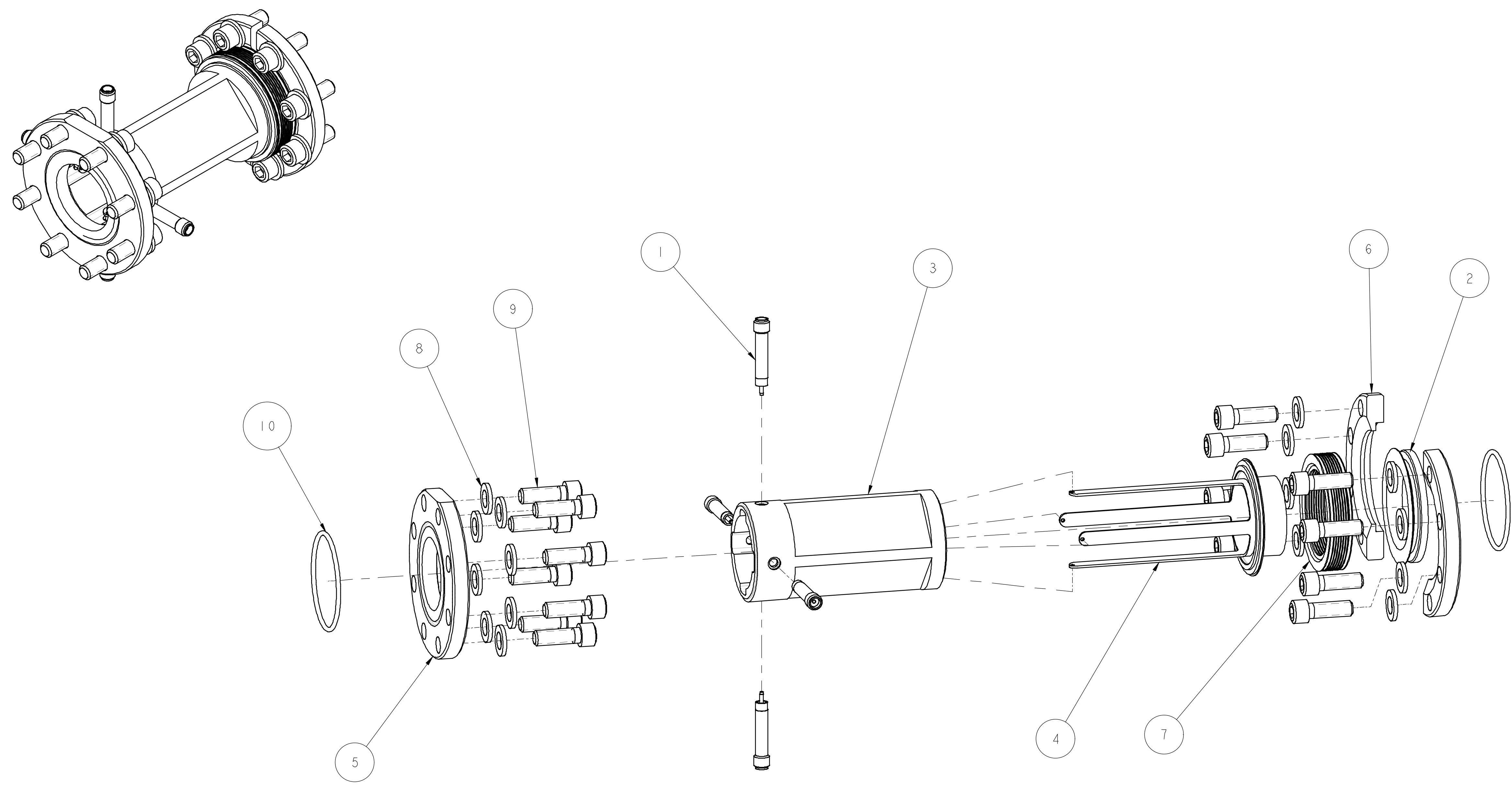
ACCT NO. _____ NO. _____
 DEL TO _____ NO. _____
 SURFACE TREATMT _____
 TREATMENT _____
 METHOD _____
 PROJECT NUMBER N/A
 PROJECT NAME N/A
 DWG BY Andrew Zachoszczyk DATE 26-Oct-00
 CHK Daryl Oshatz DATE _____
 APPR Daryl Oshatz DATE _____

ERNEST ORLANDO LAWRENCE
 BERKELEY NATIONAL LABORATORY
 UNIVERSITY OF CALIFORNIA - BERKELEY

SNS - FES MEBT
 PROFILE MONITOR
 PROFILE MONITOR INTERFACE

MICROFILMED: _____
 DWG TYPE _____
 SHOWN ON _____
 SCALE: 1/2
 DO NOT SCALE PRINTS

PATENT CLEAR: _____
 DESIGN ACCT. NO. _____
 CATEGORY CODE FE3313
 SHEET 1 OF 1
 DWG. NO. 25B4214
 SIZE A
 REV. _____



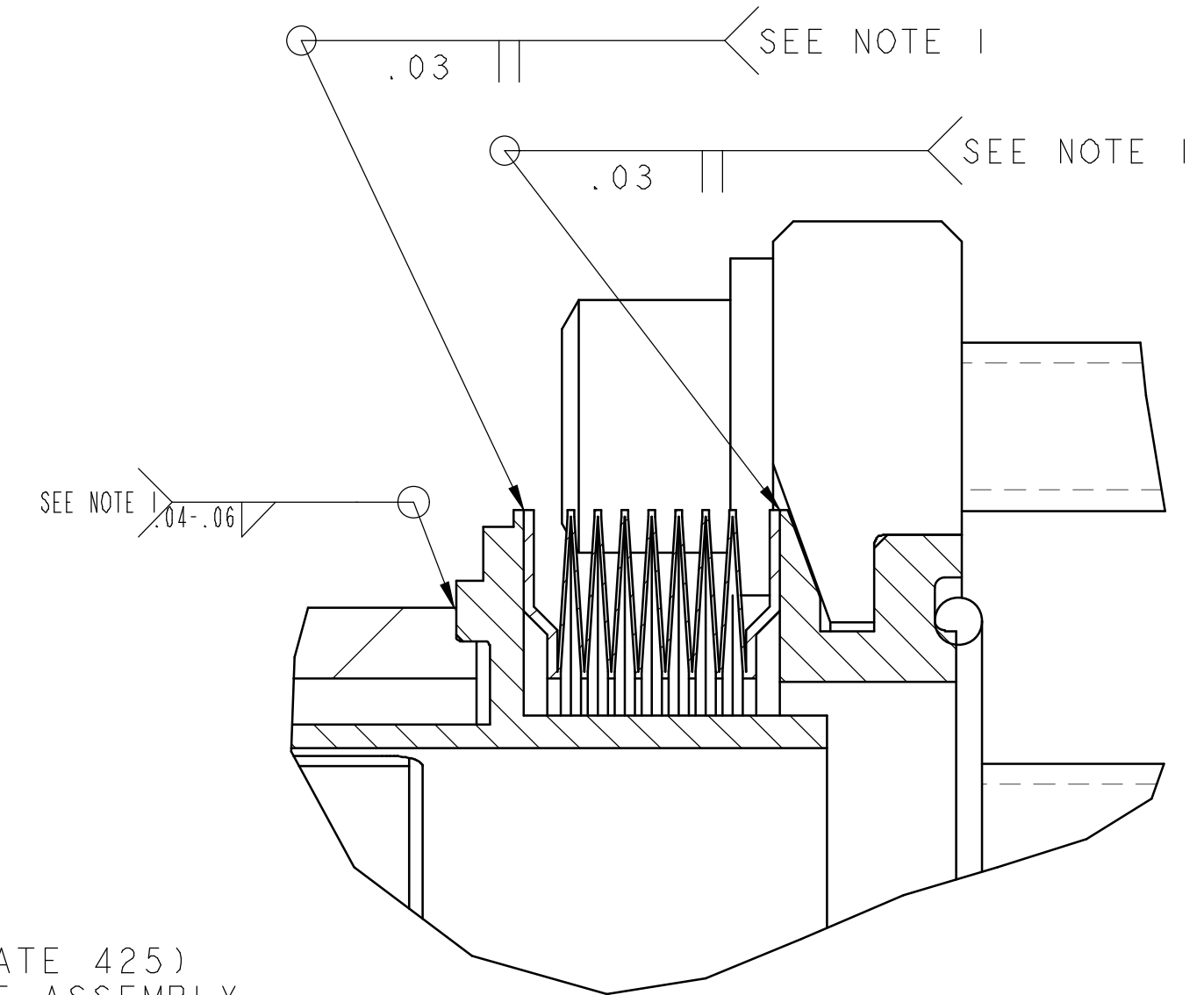
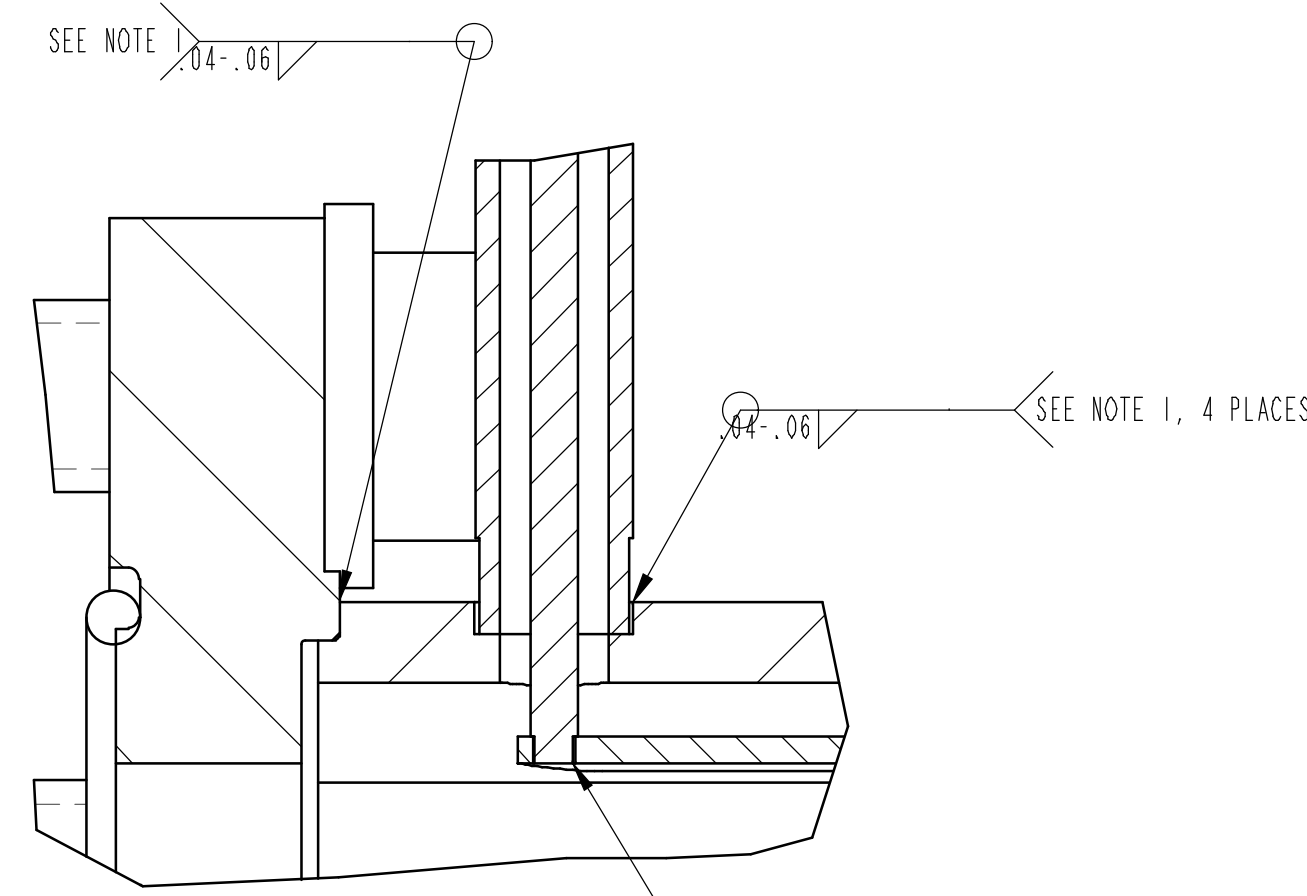
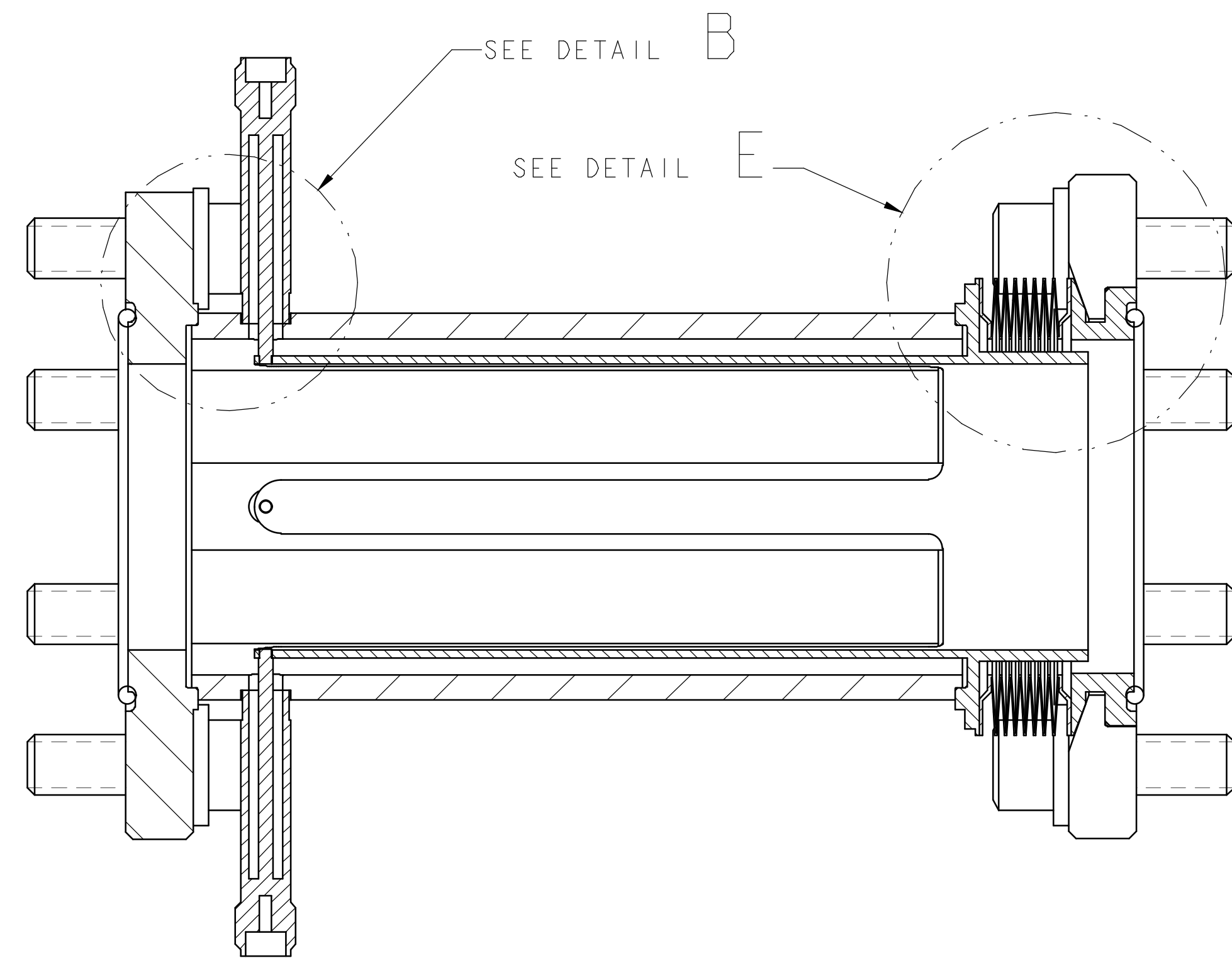
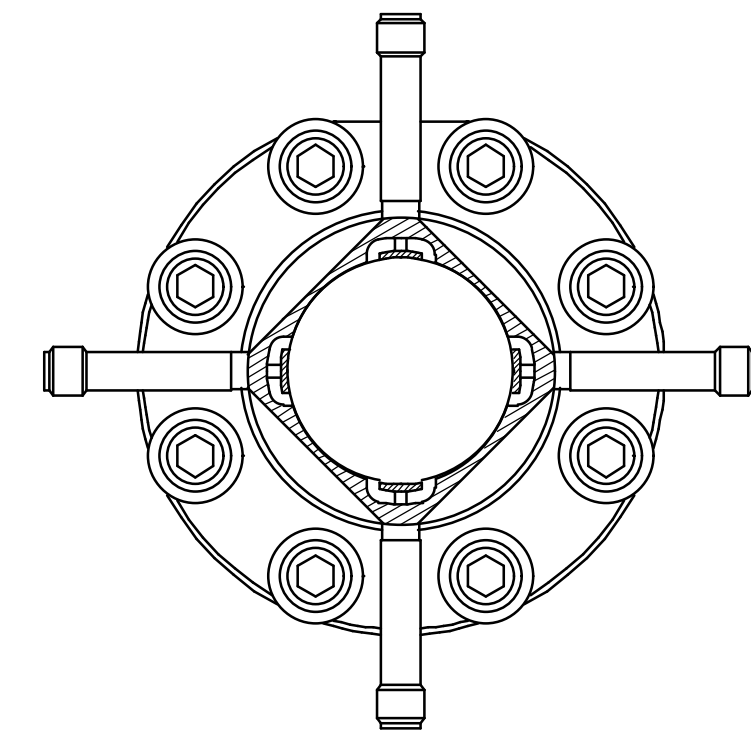
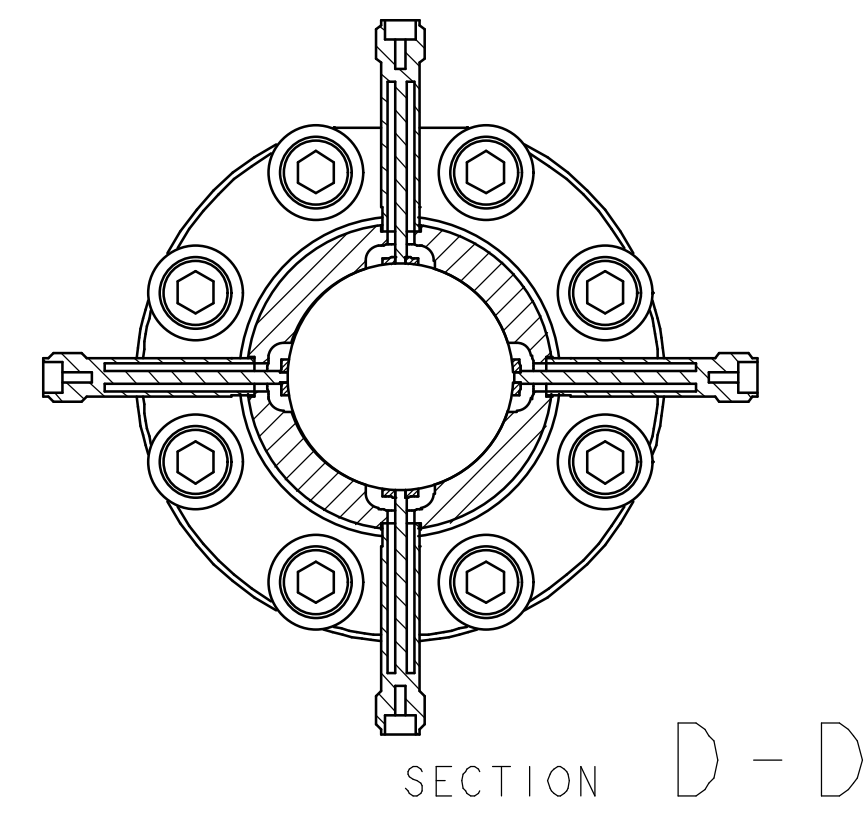
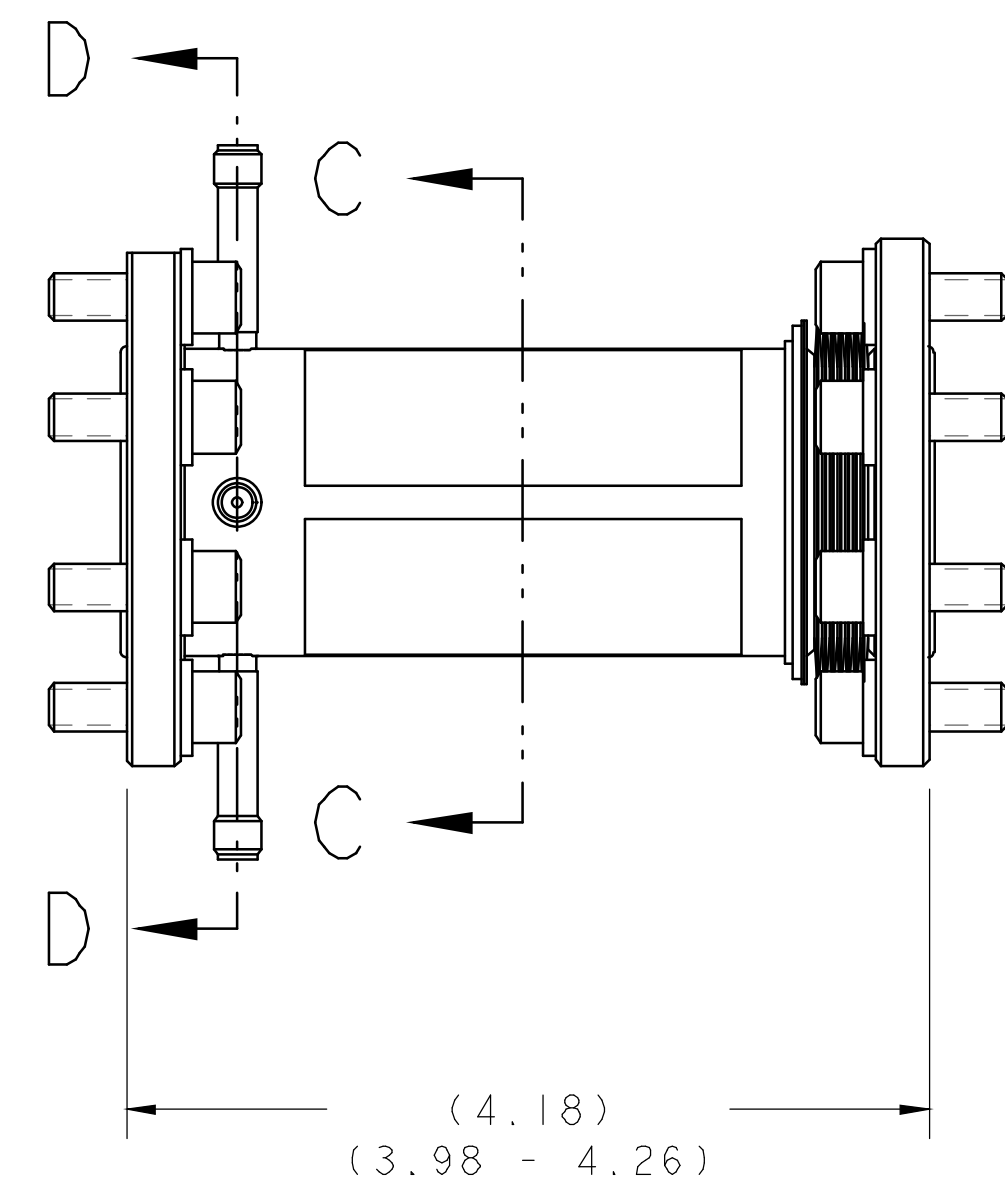
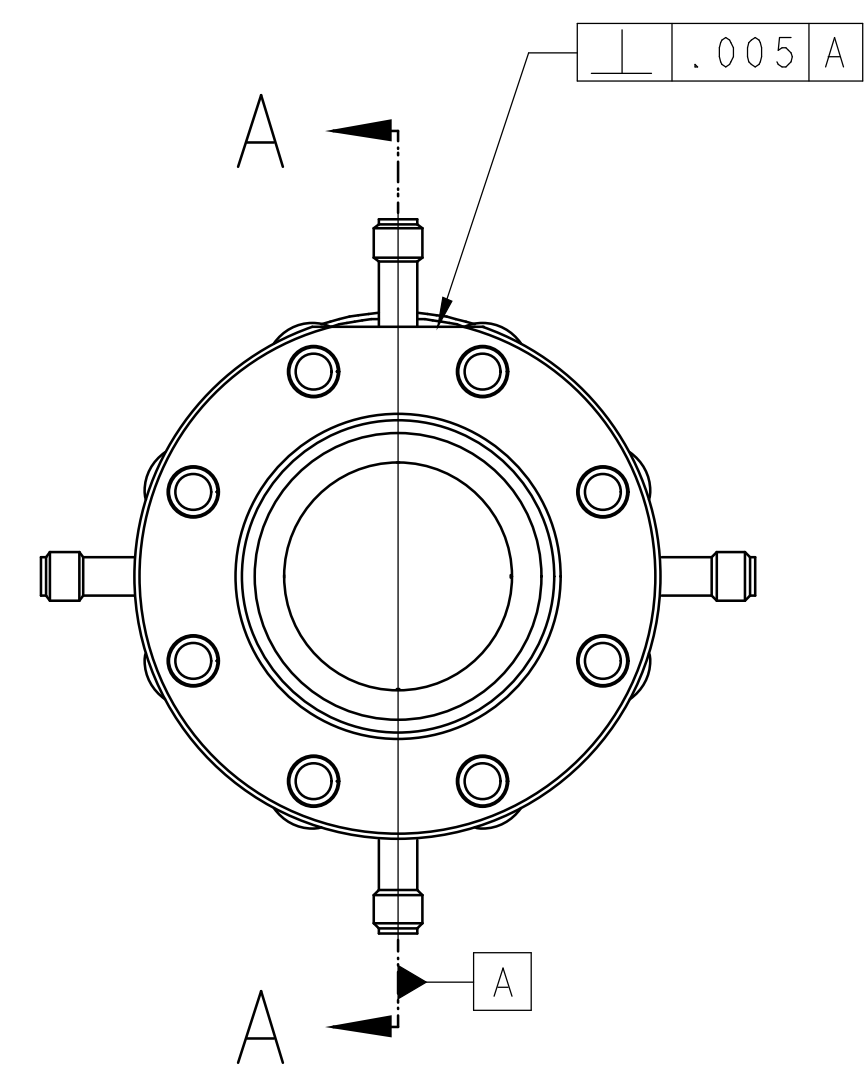
ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
10		2	2-029 O-RING SEAL	VITON
9		16	1/4-20 X 3/4 SHC SCREW	STAINLESS STEEL
8		16	1/4" NARROW FLAT WASHER	STAINLESS STEEL
7	25B170	1	30 MM BPM BELLOWS	347 STAINLESS STEEL
6	25B177	2	30 MM BPM SPLIT FLANGE	316 STAINLESS STEEL
5	25B176	1	30 MM BPM FIXED FLANGE	316 STAINLESS STEEL
4	25B174	1	30 MM BPM ELECTRODE SPOOL	316 STAINLESS STEEL
3	25B173	1	30 MM BPM BORE TUBE	316 STAINLESS STEEL
2	25B175	1	30 MM BPM BELLOWS SEAL FLANGE	316 STAINLESS STEEL
1	25B171	4	BPM SMA FEED THRU	-

<p>UNLESS OTHERWISE SPECIFIED</p> <p>PROJECTION: </p> <p>TOLERANCES: X.X ± 0.1 FRAC. ± 1/64 X.XX ± 0.03 Angles ± 0.5° X.XXX ± 0.010 FINISH </p> <p>DO NOT SCALE PRINT</p> <p>THREADS ARE CLASS 2 CHAMFER ENDS OF ALL SCREW THREADS 30° CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS BREAK EDGES .016 MAX. ON MACHINED WORK REMOVE BURRS, WELD SPLATTER & LOOSE SCALE IN ACCORDANCE WITH ASME Y14.SW & B46.1</p>				<p>SHOP ORDERS</p> <p>ACCT. NO. _____ NO. _____ SER. NO. _____ DATE ISSD _____ DEL. TO _____ DATE RECD _____</p> <p>SURFACE TREATMT SEE NOTES (PAGE 2) IDENT. METHOD TAG</p> <p>PROJECT NUMBER _____ PROJECT NAME _____ DWS BY TREVOR GOULDING DATE 17-Dec-99 CHK BY _____ DATE 12-Jan-00 APP BY _____ DATE _____</p>		<p>ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY</p> <p>UNIVERSITY OF CALIFORNIA - BERKELEY</p> <p></p> <p>SMS-FES MEBT MECHANICAL SUBSYSTEMS 30 MM BEAM POSITION MONITOR</p> <p>MICROFILMED: _____ DWG. TYPE ASSEM SCALE: 1/1 DO NOT SCALE PRINTS</p> <p>PATENT CLEAR: _____ SHOWN ON SHEET 1 OF 2 CATEGORY CODE FE3313 DWG. NO. 25B1784 SIZE C REV. 1</p>			
REV	DWG	CHK	ZONE	DATE	CHANGES				
C		D7		8/18/00	ADDED PERPENDICULARITY TOLERANCE				
B		BI-5		1/27/00	ADDED WELD SIZES TO SYMBOLS				
B				1/27/00	CHANGED ORIENTATION OF EXPLODED VIEW				
B				1/27/00	ADDED NOTE & UPDATED TITLE BLOCK				

8 7 6 5 4 3 1

D
C
B
A

8 7 6 5 4 3 2 1



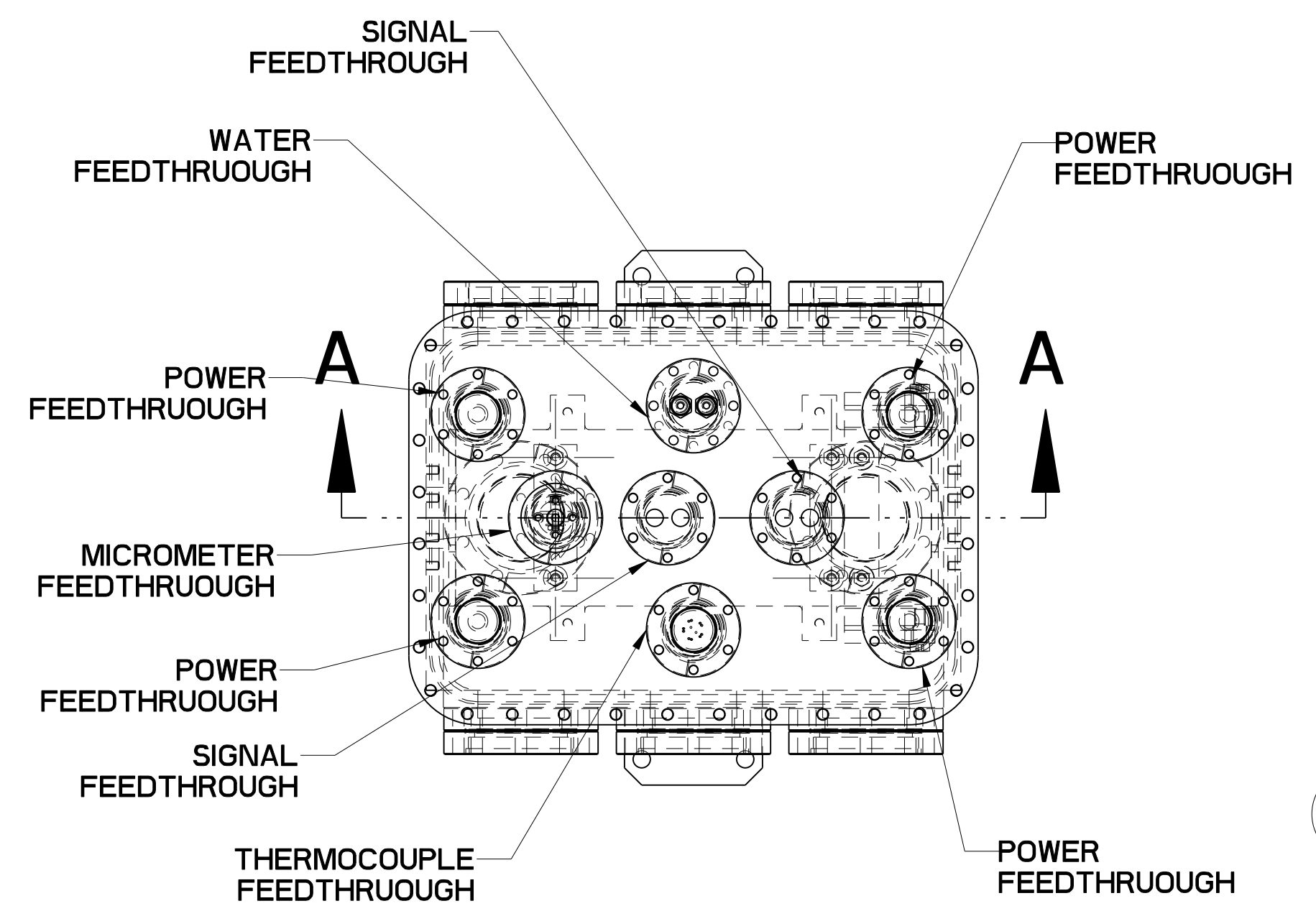
SECTION A - A
SCALE 2/1

DETAIL B
SCALE 4/1

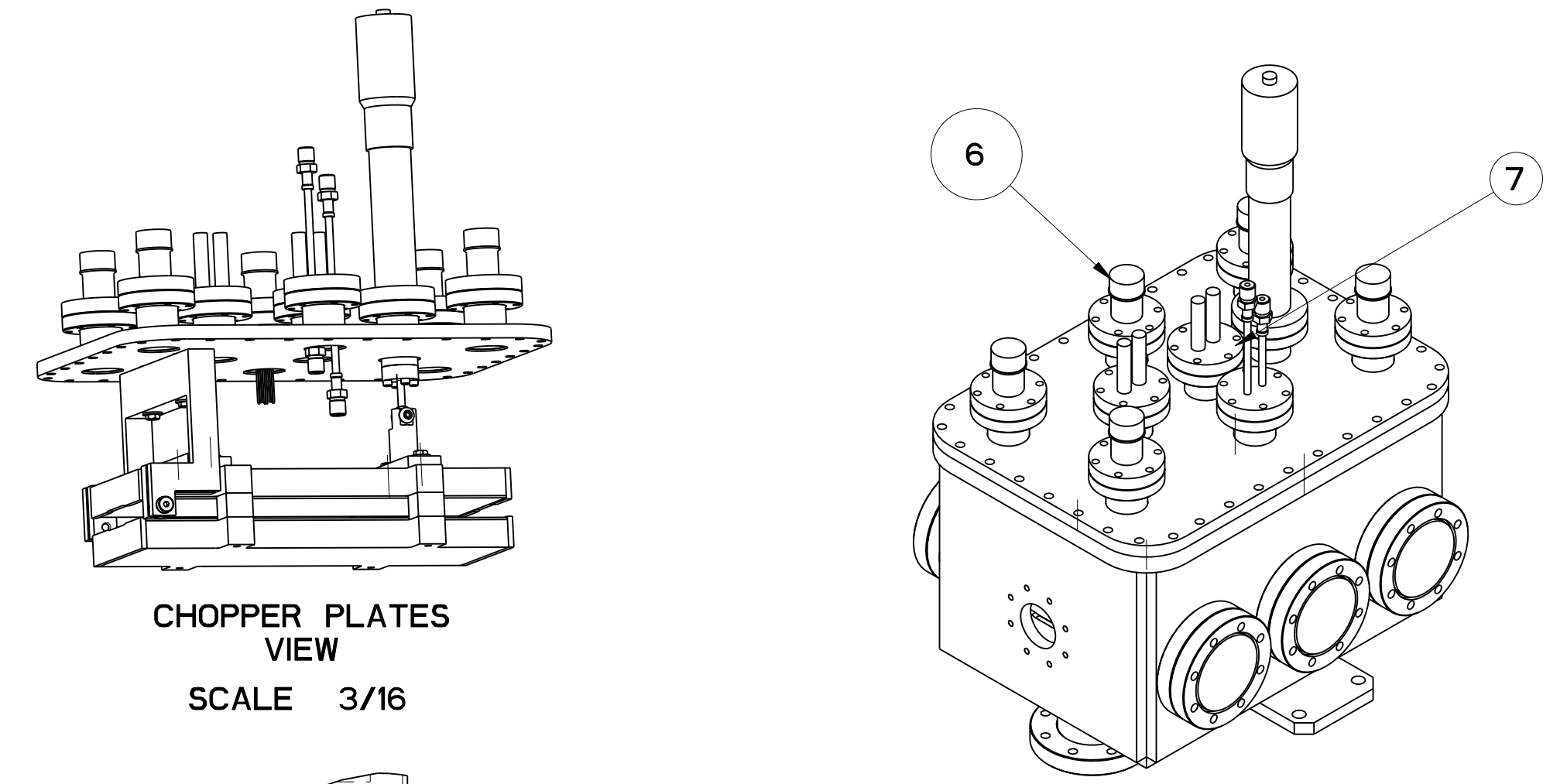
DETAIL E
SCALE 4/1

- NOTES**
1. FINISHED PART TO BE VACUUM TIGHT. LEAK RATE NOT TO EXCEED 1×10^{-8} torr l/sec. He.
 2. ASSEMBLE IN CLEAN ENVIRONMENT. AFTER ASSEMBLY, WRAP TO MAINTAIN CLEANLINESS.

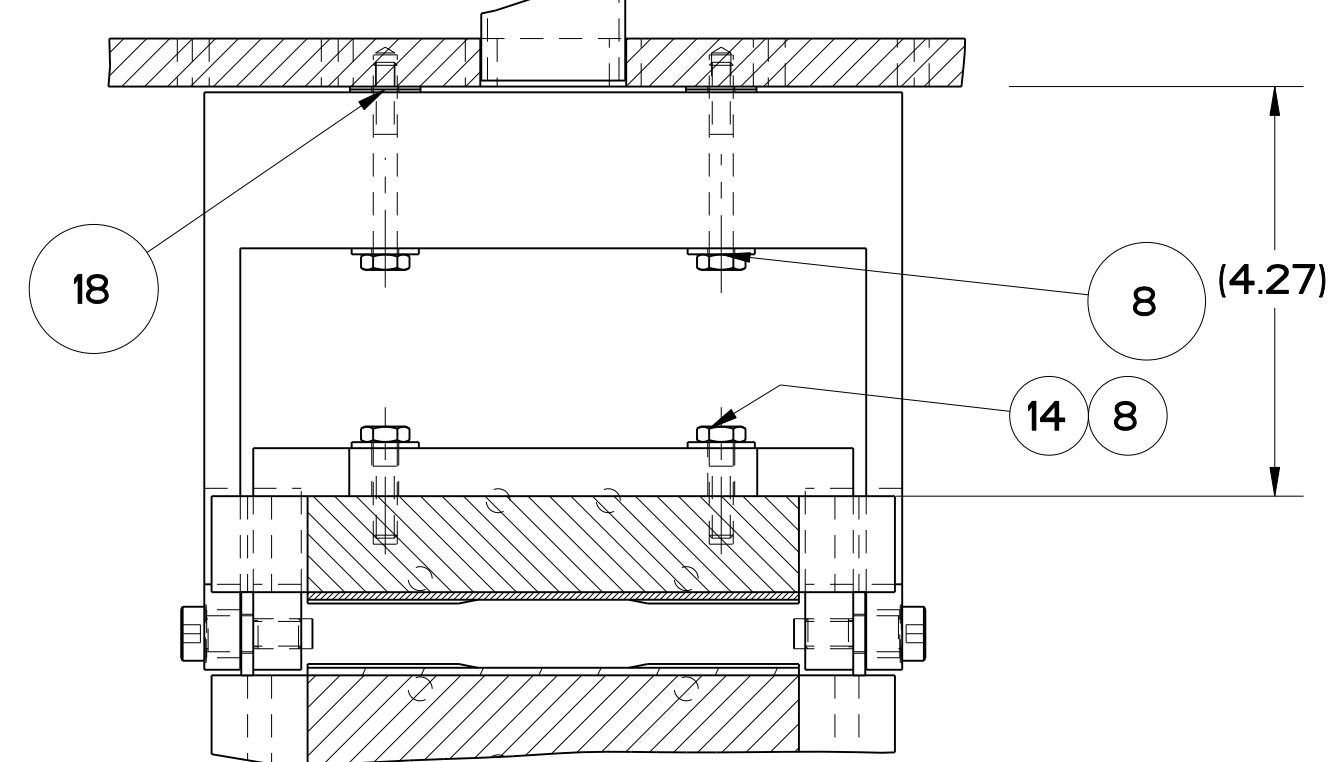
UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO. -		ERNEST ORLANDO LAWRENCE	
PROJECTION:		ACCT. NO. -		NO. RECD. -		BERKELEY NATIONAL LABORATORY	
TOLERANCES		DEL. TO -		DATE ISSD -		UNIVERSITY OF CALIFORNIA - BERKELEY	
X.X ± 0.1		FRAC. ± 1/64		DATE RECD. -		SMS-FES MEBT	
X.XX ± 0.03		Angles ± 0.5°		SURFACE TREATMT SEE NOTES (PAGE 2)		MECHANICAL SUBSYSTEMS	
X.XXX ± 0.010		FINISH		PROJECT NAME		30 MM BEAM POSITION MONITOR	
DO NOT SCALE PRINT		PROJECT NUMBER		PROJECT METHOD TAG		MICROFILMED:	
THREADS ARE CLASS 2		PROJECT NAME		DATE		DWG. TYPE	
CHAMFER ENDS OF ALL SCREW THREADS 30°		TREVOR GOULDING		22-Dec-99		ASSEM	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DATE		-		SHOWN ON	
BREAK EDGES .016 MAX. ON MACHINED WORK		DATE		-		CATEGORY CODE	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		DATE		-		FE3313	
IN ACCORDANCE WITH ASME Y14.SW & B46.1		DATE		-		DWG. NO.	
REV	DWG	CHK	ZONE	DATE	CHANGES	25B1784	
						SHEET 2 OF 2	
						SIZE REV. B	



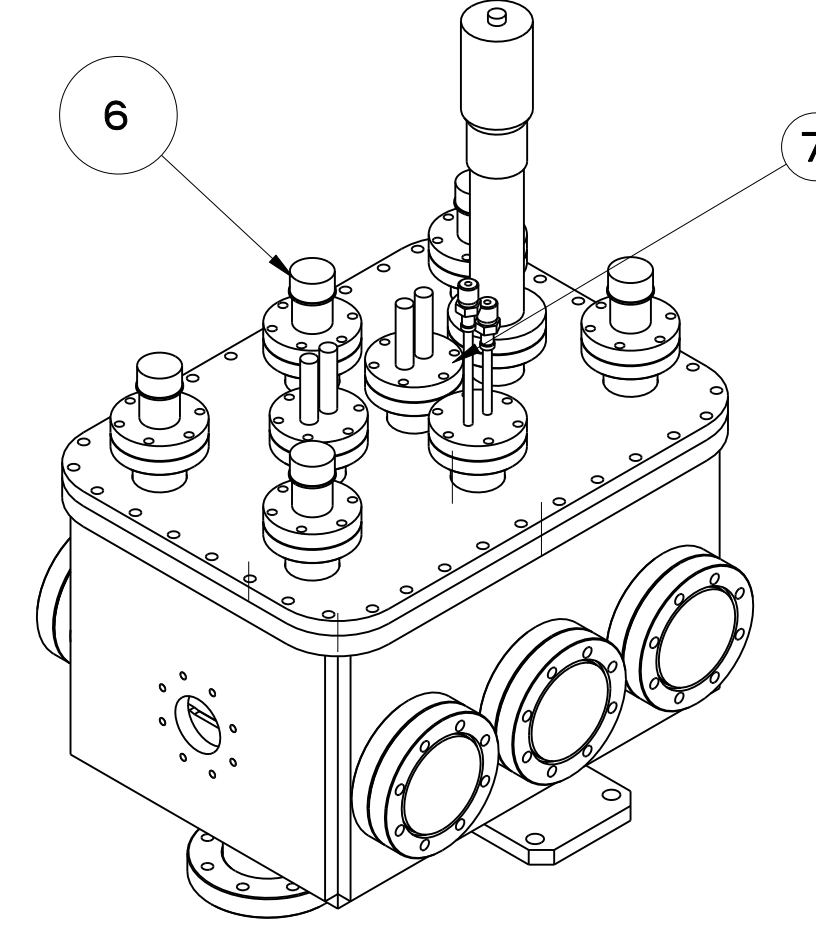
SCALE 1/4



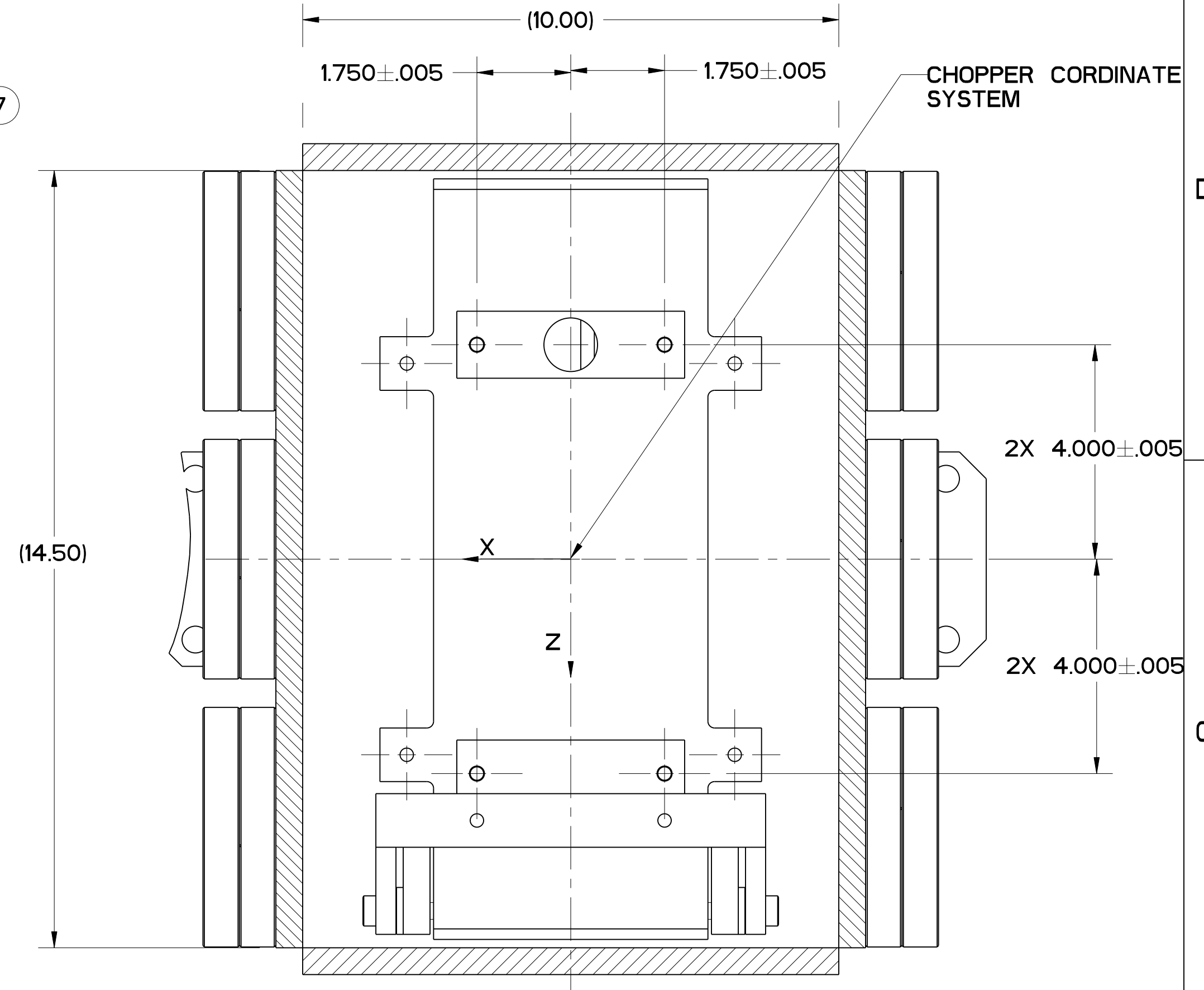
CHOPPER PLATES VIEW
SCALE 3/16



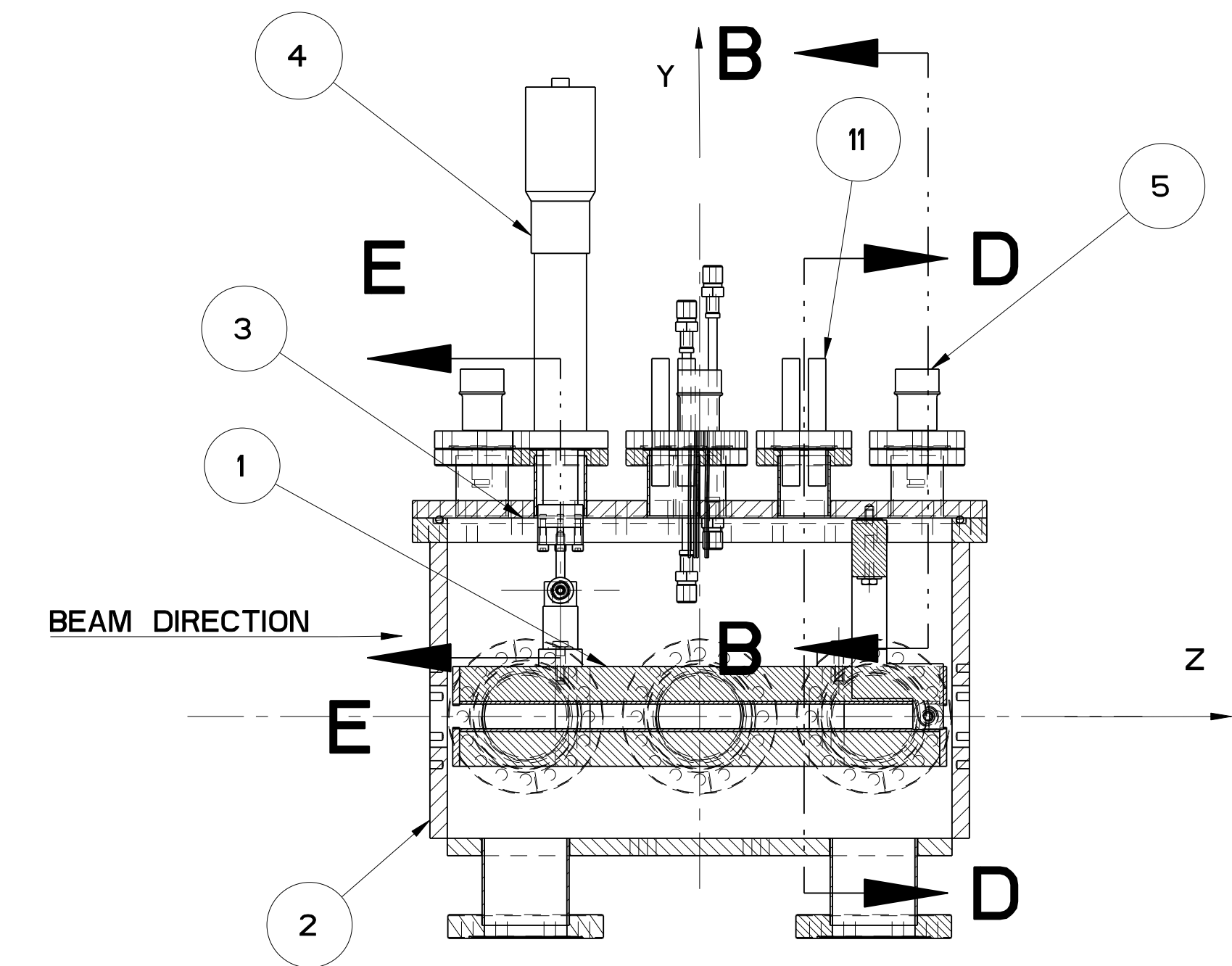
SECTION D-D
SCALE 1/2



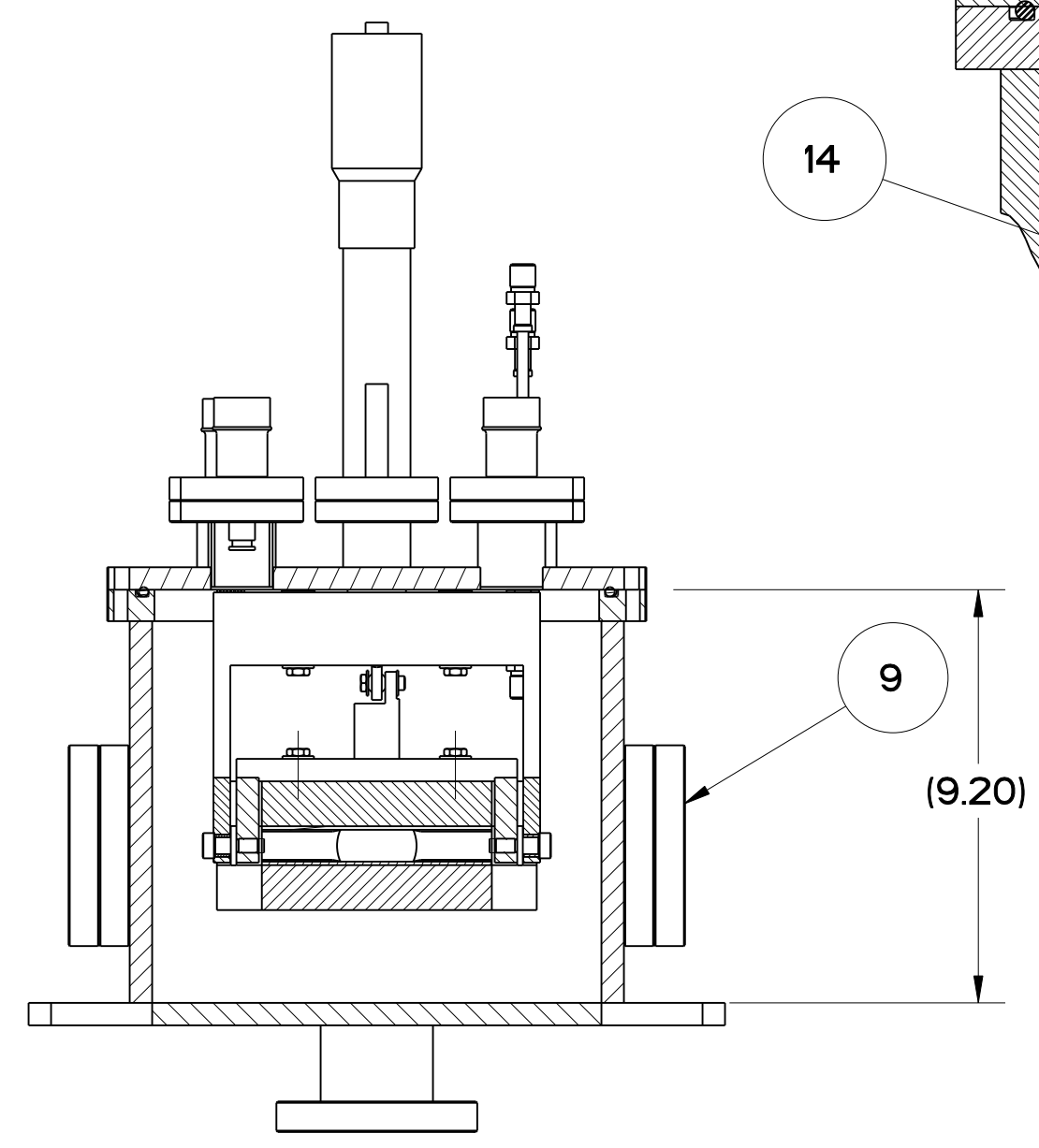
SCALE 3/16



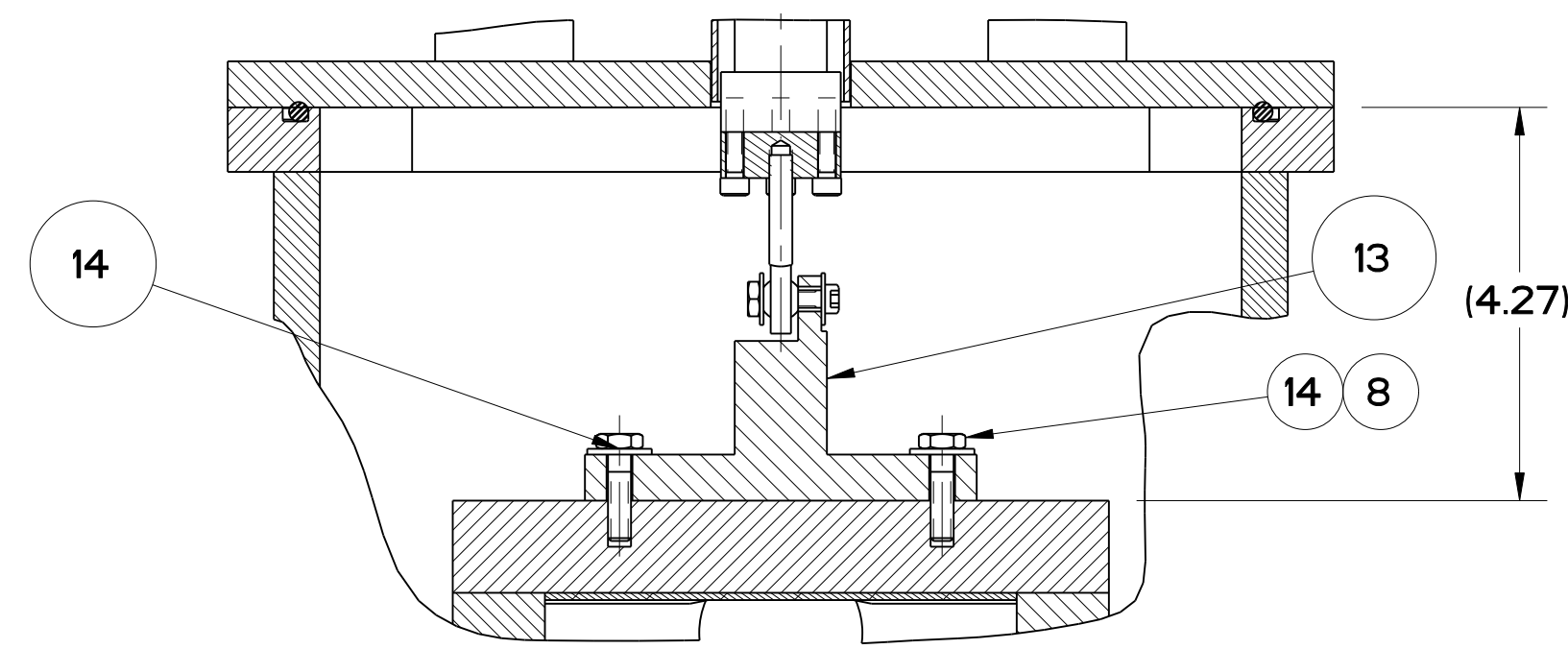
SECTION C-C
SCALE 1/2



SECTION A-A



SECTION B-B



SECTION E-E
SCALE 1/2

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
18	4		SHIM SUSPENSION	
16	nnXnnn	2	THIRD LINE TITLE	VESPEL SP-3
14	4		HEX. HD. BOLT 25-28 UNF 2A, .75	
13	nnXnnn	1	BALL JOINT ASSEMBLY	-
12	nnXnnn	1	INNER PIVOT BRACKET	-
11	nnXnnn	2	SIGNAL FEEDTHROUGH	-
10	nnXnnn	1	OUTER PIVOT BRACKET	-
9	nnXnnn	6	4 1/2 CONFLAT VIEW PORT	-
8	6		WASHER 25 NOM	
7	nnXnnn	1	WATER FEEDTHROUGH	-
6	nnXnnn	1	THERMOCOUPLE FEEDTHROUGH	-
5	4		POWER FEEDTHROUGH (LANL)	-
4	nnXnnn	1	CHOPPER MICROMETER FEEDTHROUGH	-
3	25B426	1	CHOPPER BOX COVER ASSEMBLY	-
2	25B421	1	CHOPPER BOX WELDMENT	-
1	nnXnnn	1	CHOPPER PLATES ASSY (LANL)	-

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS	
PROJECTION:		SER. NO.	-
TOLERANCES:		NO.	1
XX ± 0.1	FRAC ± 1/84	DATE	-
XXX ± 0.03	Angles ± 10°	ISSD	-
XXXX ± 0.010	FINISH 12/	DATE	-
DO NOT SCALE PRINT		RECD	-
THREADS ARE CLASS 2		SURFACE TREATMT	-
CHAMFER ENDS OF ALL SCREW THREADS 30°		TREAT	-
CUT ROUND, 15 THREAD RELIEF ON MACHINED THREADS		METHOD	-
BREAK EDGES .016 MAX. ON MACHINED WORK		PROJECT	N/A
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		NUMBER	-
IN ACCORDANCE WITH ASME Y14.5M & B46J		PROJECT NAME	N/A
		DWG BY	Andrew Zachoszc
		DATE	25-Sep-00
		CHK BY	None
		DATE	-
		APR BY	Daryl Oshatz
		DATE	-

ERNEST ORLANDO LAWRENCE
BERKELEY NATIONAL LABORATORY
UNIVERSITY OF CALIFORNIA - BERKELEY

SNS - FE MBT
BEAM TRANSPORTATION SYSTEMS
CHOPPER ASSEMBLY INTERFACE

ASSEM

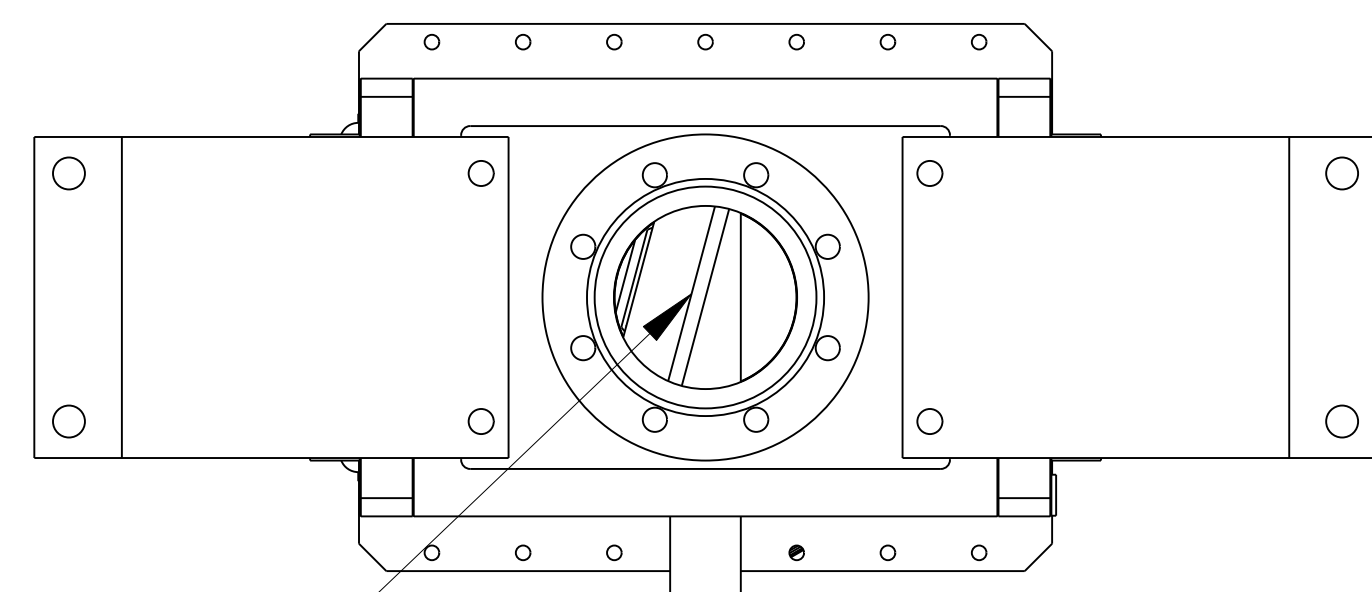
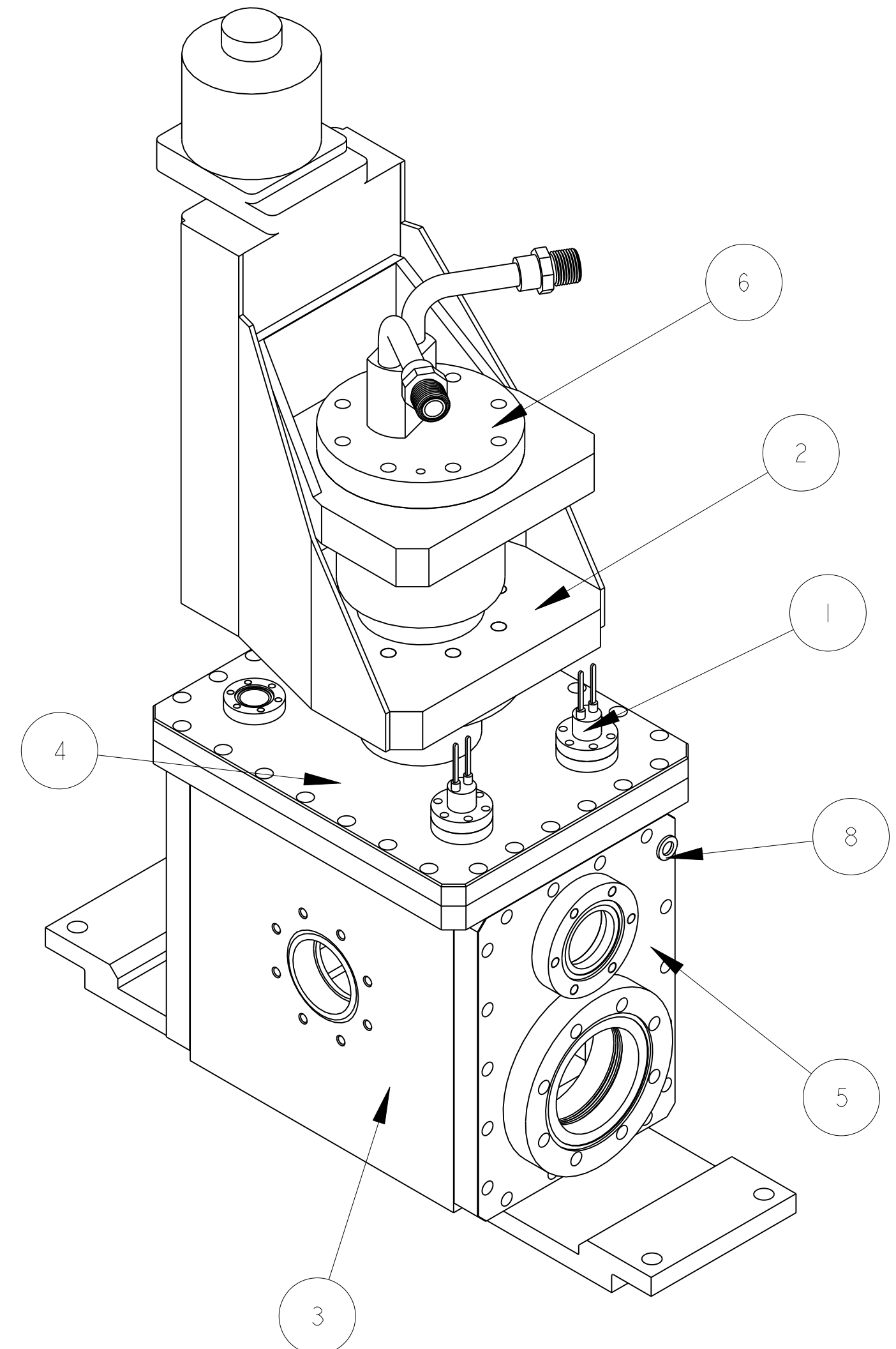
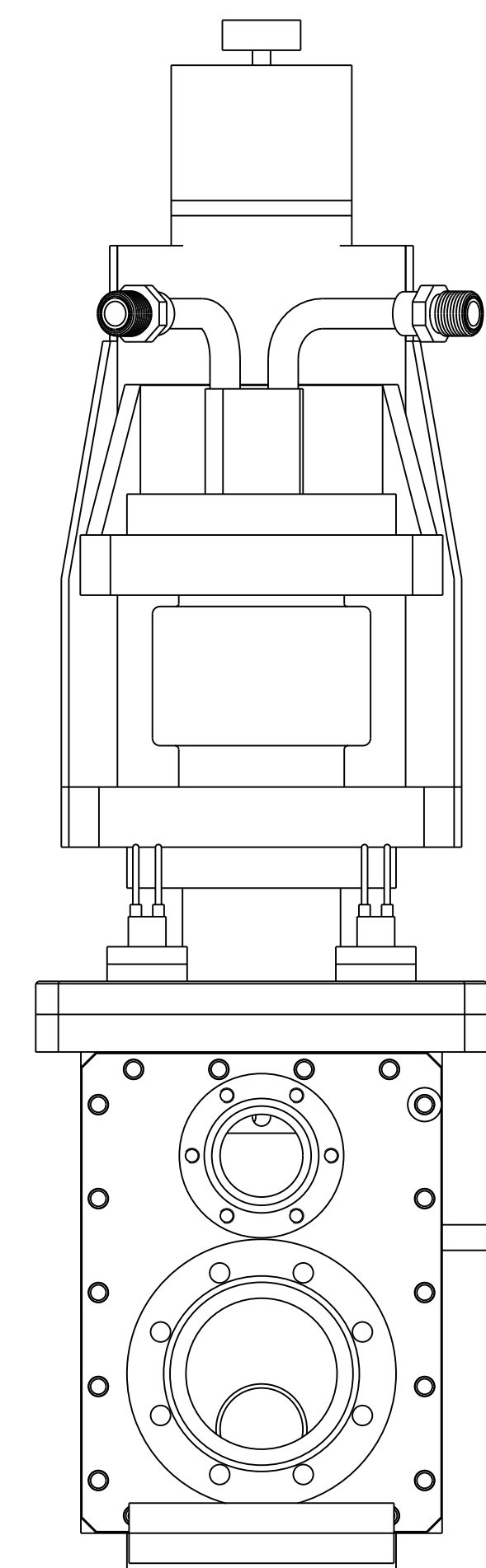
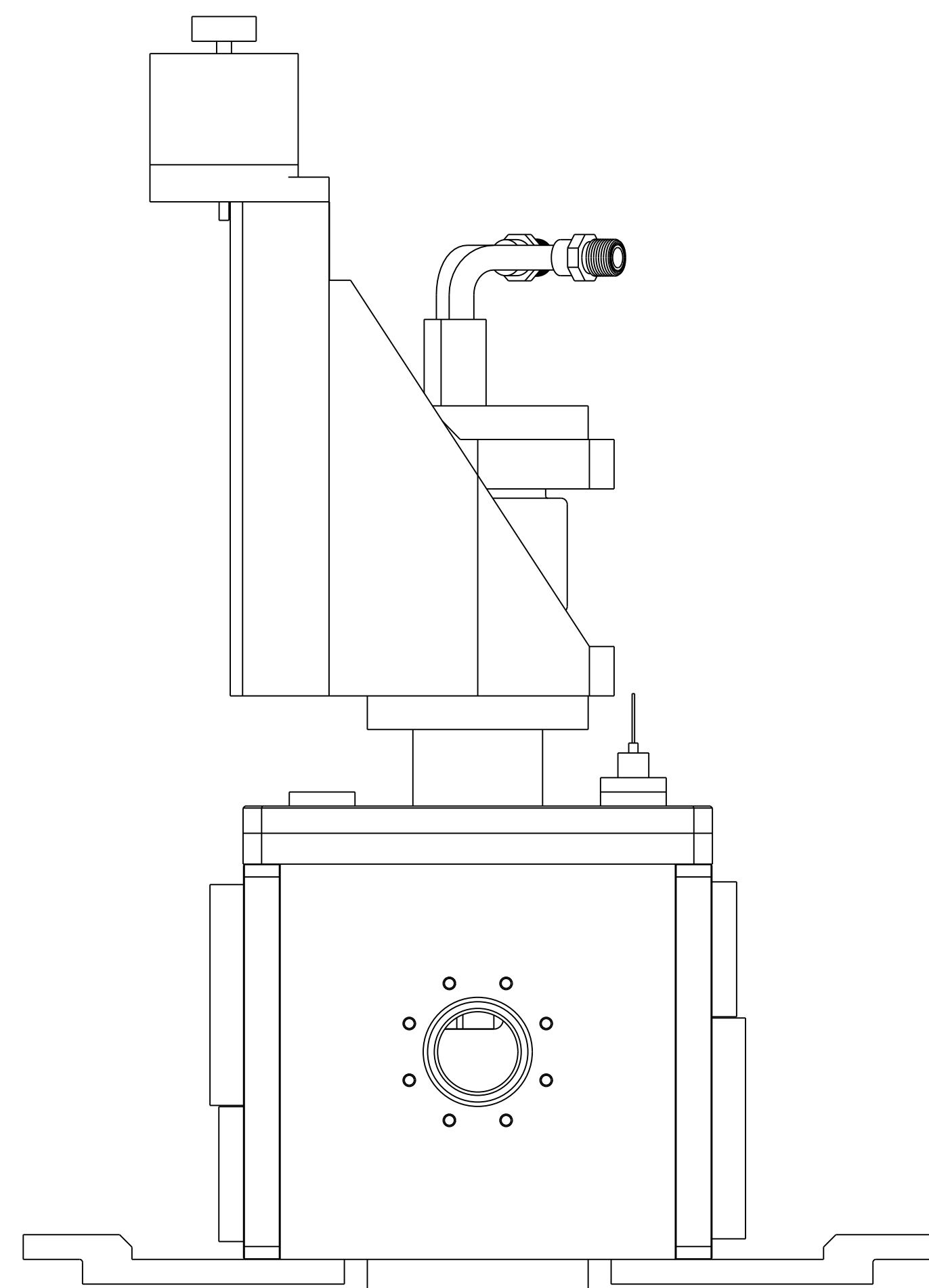
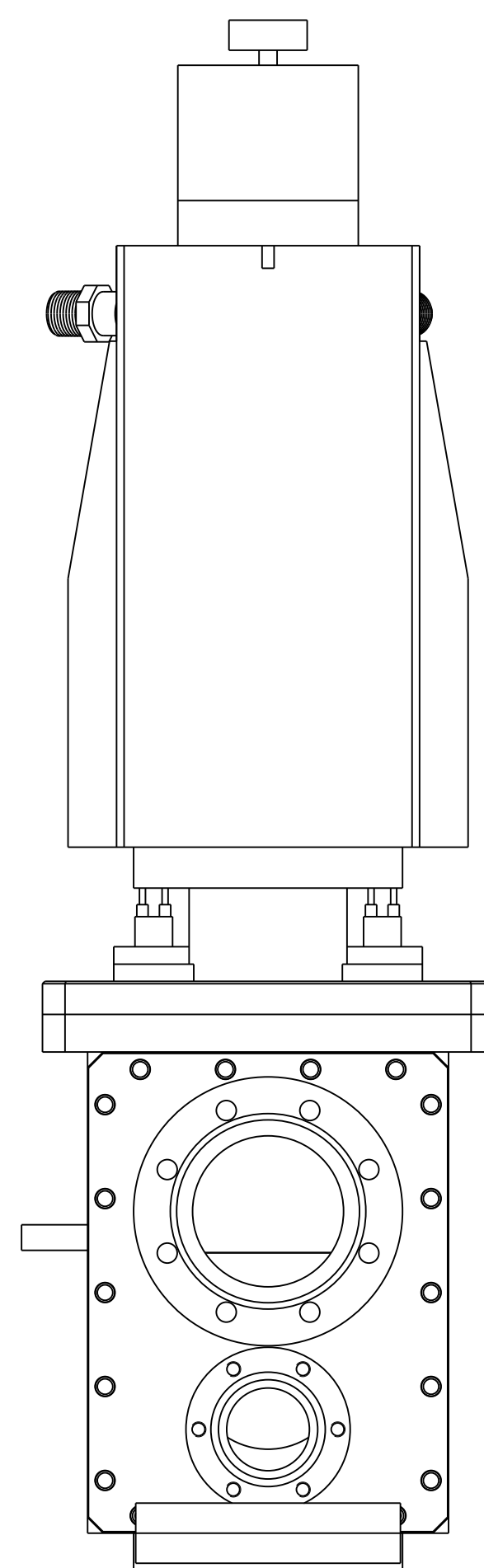
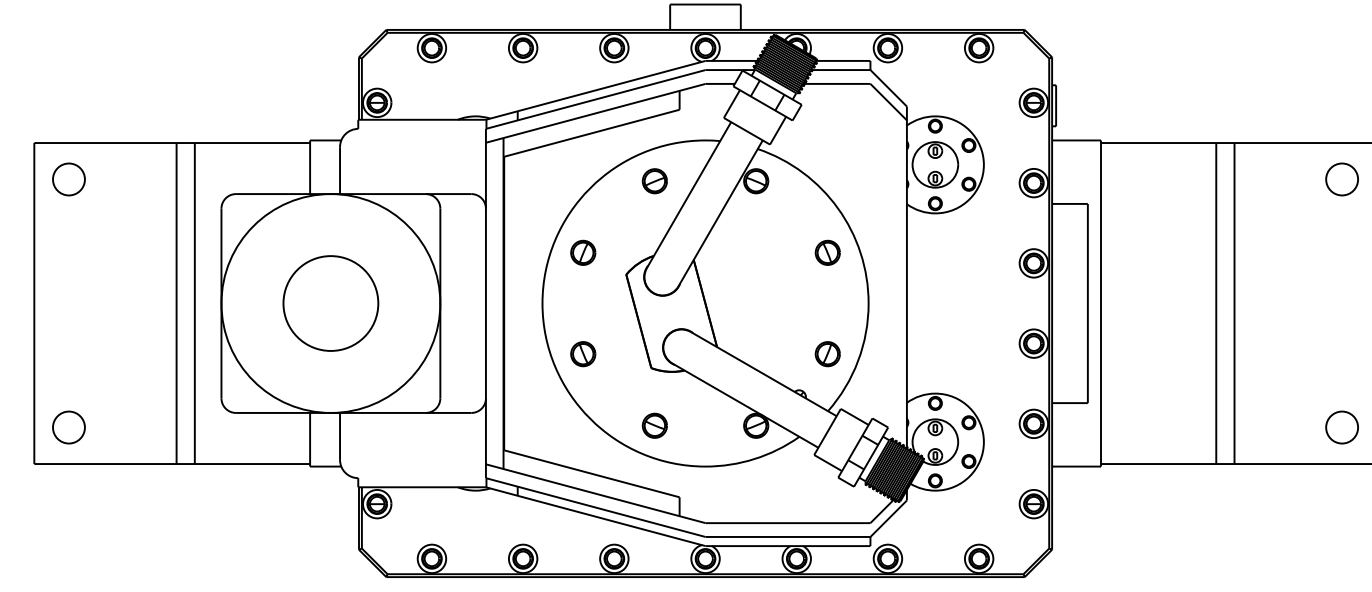
SCALE: 1/4

SHEET 1 OF 1

DWG. NO. 25B4204

SIZE B

REV. 1



ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
8	nnXnnn	1	THIRD LINE TITLE	ss
7	nnXnnn	1	THIRD LINE TITLE	-
6	25B416	1	WATER MANIFOLD	-
5	25B410	2	VIEW PORT FLANGE WELDMENT	304 SS
4	25B407	1	VACUUM CHAMBER - TARGET ACTUATOR FLANGE WELDMENT	304 SS
3	25B404	1	VACUUM CHAMBER WELDMENT	304 SS
2	25B100	1	Modified Actuator, EMT-2.5-2/ Block Up	-
1	-	2	THIRD LINE TITLE	-

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED
 PROJECTION:

TOLERANCES:
 X.X ± 0.1 FRAC. ± 1/64
 X.XX ± 0.03 Angles ± 1.0°
 X.XXX ± 0.010 FINISH 12/

DO NOT SCALE PRINT
 THREADS ARE CLASS 2
 CHAMFER ENDS OF ALL SCREW THREADS 30°
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS
 BREAK EDGES .016 MAX. ON MACHINED WORK
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

SHOP ORDERS

ACCT NO.	NO.	SER. NO.	DATE
DEL TO	REQD	ISSD	ISSD
DEL TO	REQD	DATE	REQD

SURFACE TREATMT
 IDENT METHOD TAG
 PROJECT NUMBER N/A
 PROJECT NAME

DWG BY: Allan DeMello DATE: 14-Dec-00
 CHK BY: D. Oshatz DATE:
 APPR BY: D. Oshatz DATE:

**ERNEST ORLANDO LAWRENCE
 BERKELEY NATIONAL LABORATORY
 UNIVERSITY OF CALIFORNIA - BERKELEY**

SNS - FES MBET
 CHOPPER TARGET
 COMPLETE ASSEMBLY

MICROFILMED: DWG. TYPE: ASSEM SHOWN ON: - SCALE: 19/50 DO NOT SCALE PRINTS

PATENT CLEAR: DESIGN ACCT. NO.: FE3312 CATEGORY CODE: 25B4004 SHEET 1 OF 1

DWG. NO. 25B4004 SIZE A REV. 1

Calculated Bragg Peak for a Moly Target

