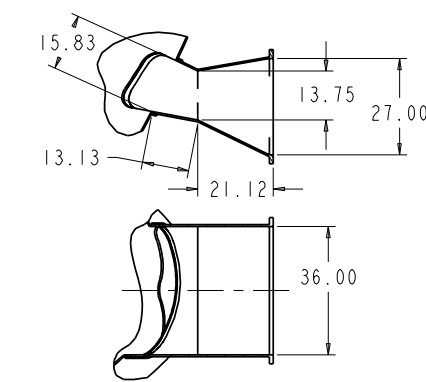
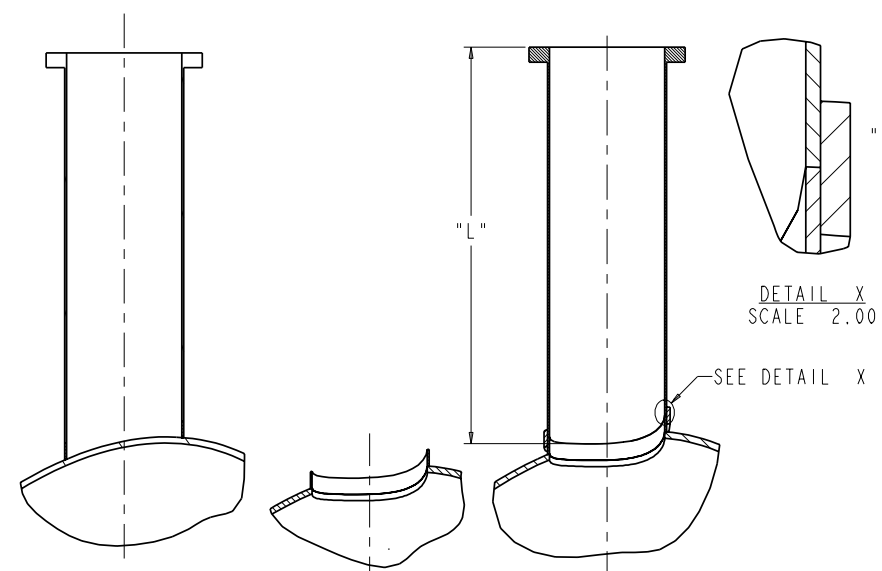
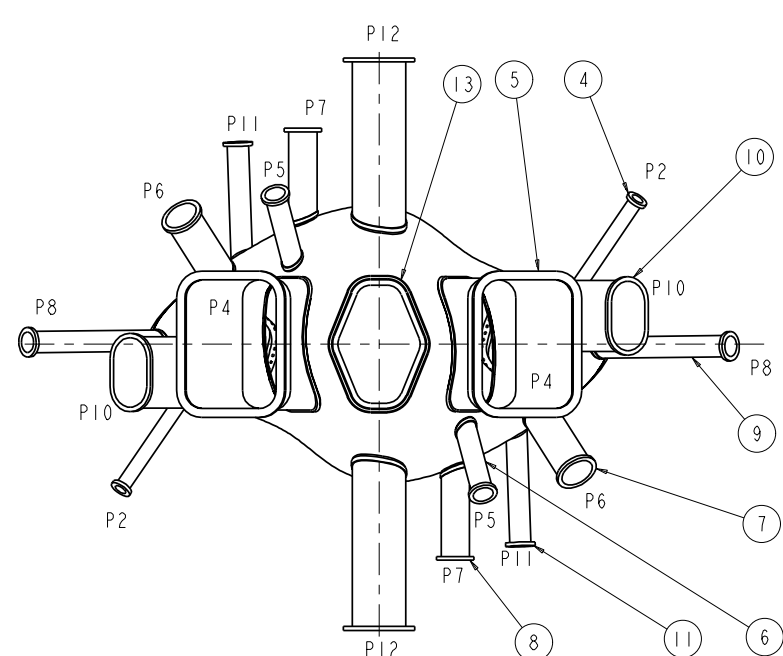


TYPICAL FLANGE CONFIGURATION  
 SCALE: 1.00

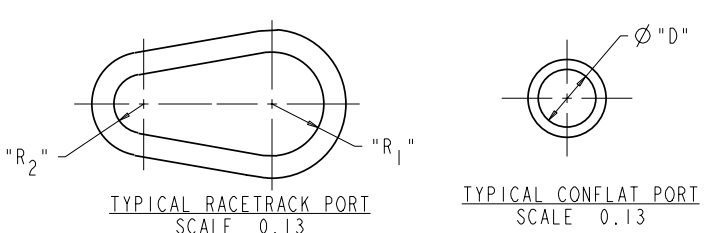


- NOTES:
1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
  2. DIMENSION ARE IN INCHES.
  3. REQUIREMENTS FOR FABRICATING THE VACUUM VESSEL ARE DEFINED IN THE DRAWINGS, MODELS, AND SPECIFICATION.
  4. GEOMETRY OF VACUUM VESSEL IS DEFINED IN CAD MODELS/FILES SEI20-001.ASM, SEI20-002.ASM AND SEI21-019.PRT
  5. HELIUM LEAK TEST SHALL SHOW NO DETECTABLE LEAK WITH LEAK DETECTOR SENSITIVITY SET AT  $1.0 \times 10^{-9}$  STD-CC/S.
  6. ALL MATERIAL EXCEPT FOR CONFLAT FLANGES TO BE UNS N06625. CONFLAT FLANGES TO BE 304 SST.
  7. BLANK MATING FLANGES AND ASSOCIATED SEALS AND HARDWARE TO BE FURNISHED FOR ALL PORTS.
  8. ADDITIONAL TOLERANCE LIMITS ARE DEFINED IN DOCUMENT NCSX-12-122002-PH.

PORT #	QTY	"L" APPROXIMATE	"D" TUBE O.D.	"R <sub>1</sub> " TUBE	"R <sub>2</sub> " TUBE	"D" TUBE	"T" TUBE THK	FLANGE TYPE
P2	2	35.5	Ø4	--	--	--	.125	Ø6" CONFLATE
P4	2	32.0	--	--	--	--	.5	O-RING FLANGE
P5	2	26.0	Ø6	--	--	--	.125	Ø8" CONFLATE
P6	2	25.0	Ø10	--	--	--	.25	Ø12" CONFLATE
P7	2	28.5	Ø8	--	--	--	.125	Ø10" CONFLATE
P8	2	44.0	Ø6	--	--	--	.125	Ø8" CONFLATE
P10	2	44.0	--	6	6	8	.25	O-RING FLANGE
P11	2	32.0	Ø6	--	--	--	.125	Ø8" CONFLATE
P12	2	47.0	--	7.5	4	17.28	.5	O-RING FLANGE



TYPICAL PORT CONFIGURATION  
 SCALE: .25

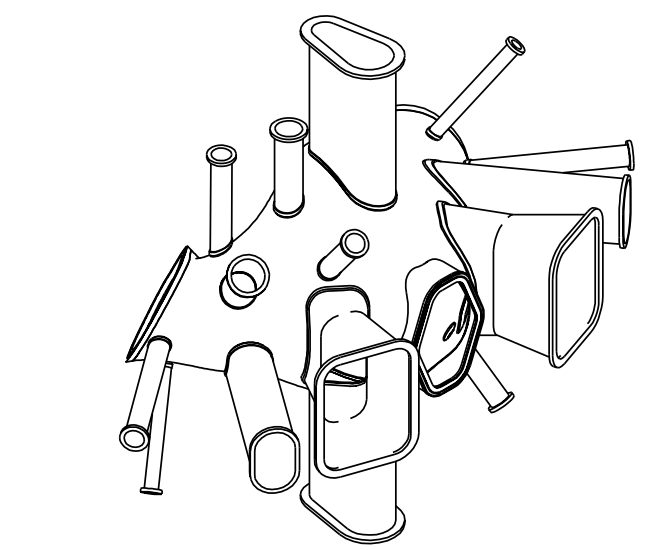


REV	DESCRIPTION	DATE	BY	CHK	SECT	DEPT	DATE	PE	REQ DATE	ORNL DATE	DOE DATE	QA	CV	EC	EE	EM	JE	N	PD	SE	ST	XAD	PES	
1	-13																							
2	-12																							
2	-11																							
2	-10																							
2	-9																							
2	-8																							
2	-7																							
2	-6																							
2	-5																							
2	-4																							
2	-3																							
1	-2																							
AR	X	-1																						

QUALITY VERIFICATION  
 MECHANICAL AND STRUCTURAL  
 REFERENCE ORNL-DA-685

ON CLASS DOCUMENTS REQUIRED (APPLICABLE TO PART NO.)	DATE
303 INITIAL WELD REPORT	X
323 INITIAL SECT CHECK	X
326 SPECIAL MATERIAL INSPECTION REPORT	X
205 IMMEDIATE INSPECTION AND TEST PLAN	X
312 FIELD INSPECTION AND TEST PLAN	X
321 FIELD AND WELD INSPECTION REPORT	X
322 WELD FIELD REPORT (FORM)	X
310 CLEAN TEST REPORT	X
315 CLEANING CERT	X
318 DEVIATION REQUEST	X
319 NONCONFORMANCE REPORT	X
323 319M REVISION REPORT	X
330 FUNCTIONAL TEST REPORT	X

PRELIMINARY  
 FOR INFORMATION ONLY



ISOMETRIC VIEW

1 SCALE: .06

REV	DESCRIPTION	DATE	BY	CHK	SECT	DEPT	DATE	PE	REQ DATE	ORNL DATE	DOE DATE	QA	CV	EC	EE	EM	JE	N	PD	SE	ST	XAD	PES	
A	GENERAL REVISION		GHJ				5-30																	

SCALE NOTED

TOLERANCES UNLESS OTHERWISE SPECIFIED

FRACTIONS ±.01  
 XX DECIMALS ±.005  
 ANGLES ±0°15'  
 BREAK SHARP EDGES .06 MAX  
 FINISH UNLESS OTHERWISE SPECIFIED

DES P. L. GORANSON 12/02  
 DRW W. J. COLE & G. H. JONES 12/02

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 U.S. GOVERNMENT CONTRACT NO. DE-AC05-80OR21400  
 by BATTELLE, LLC, Oak Ridge, Tennessee

NATIONAL COMPACT STELLERATOR EXPERIMENT  
 VACUUM VESSEL PERIOD ASSEMBLY

VERSION NO. 134  
 PLANT XX  
 BLDG XX  
 FL 1  
 SHT 2  
 OF 2  
 TYPE XX  
 CLASS U

RELEASE LEVEL WIP  
 SEI20-002  
 REV A

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