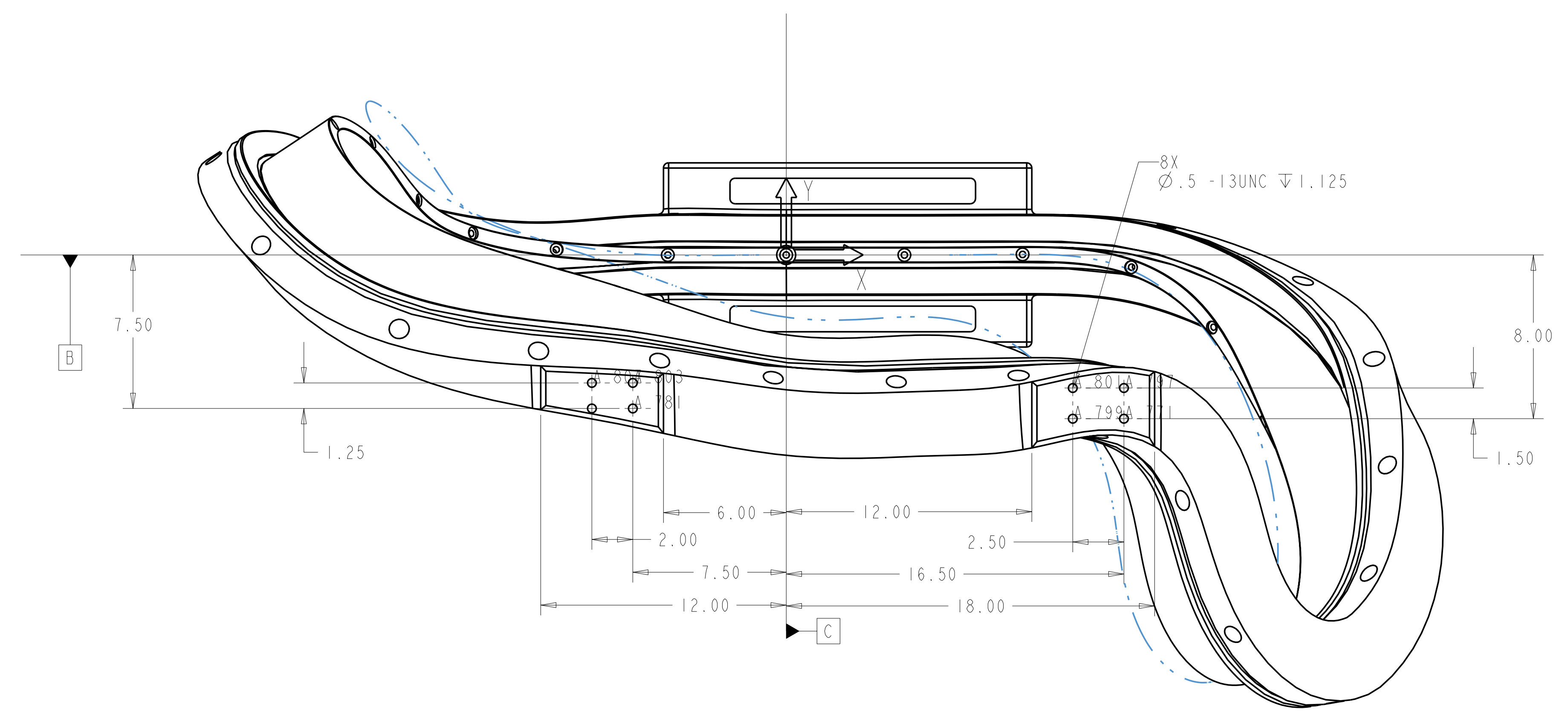
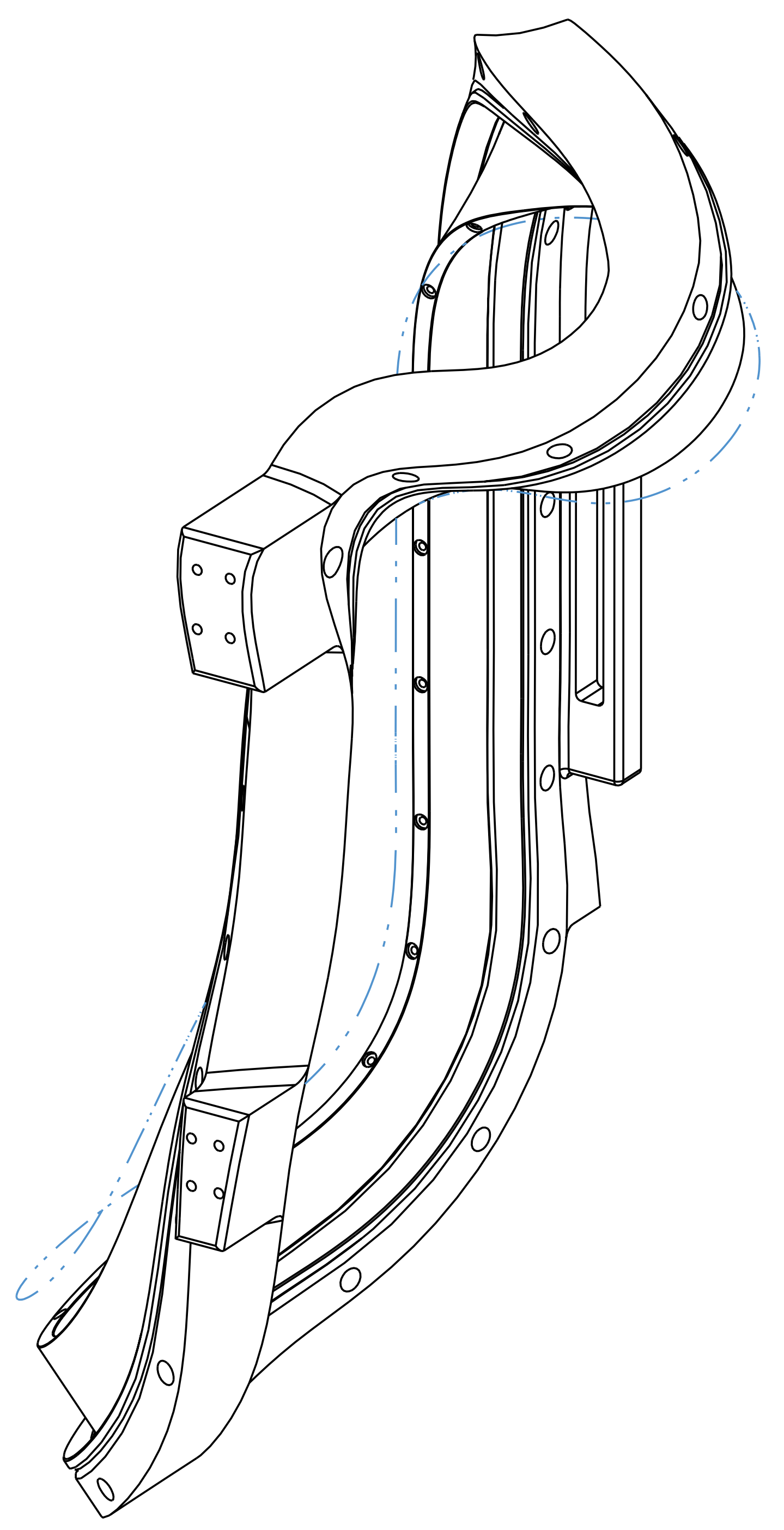
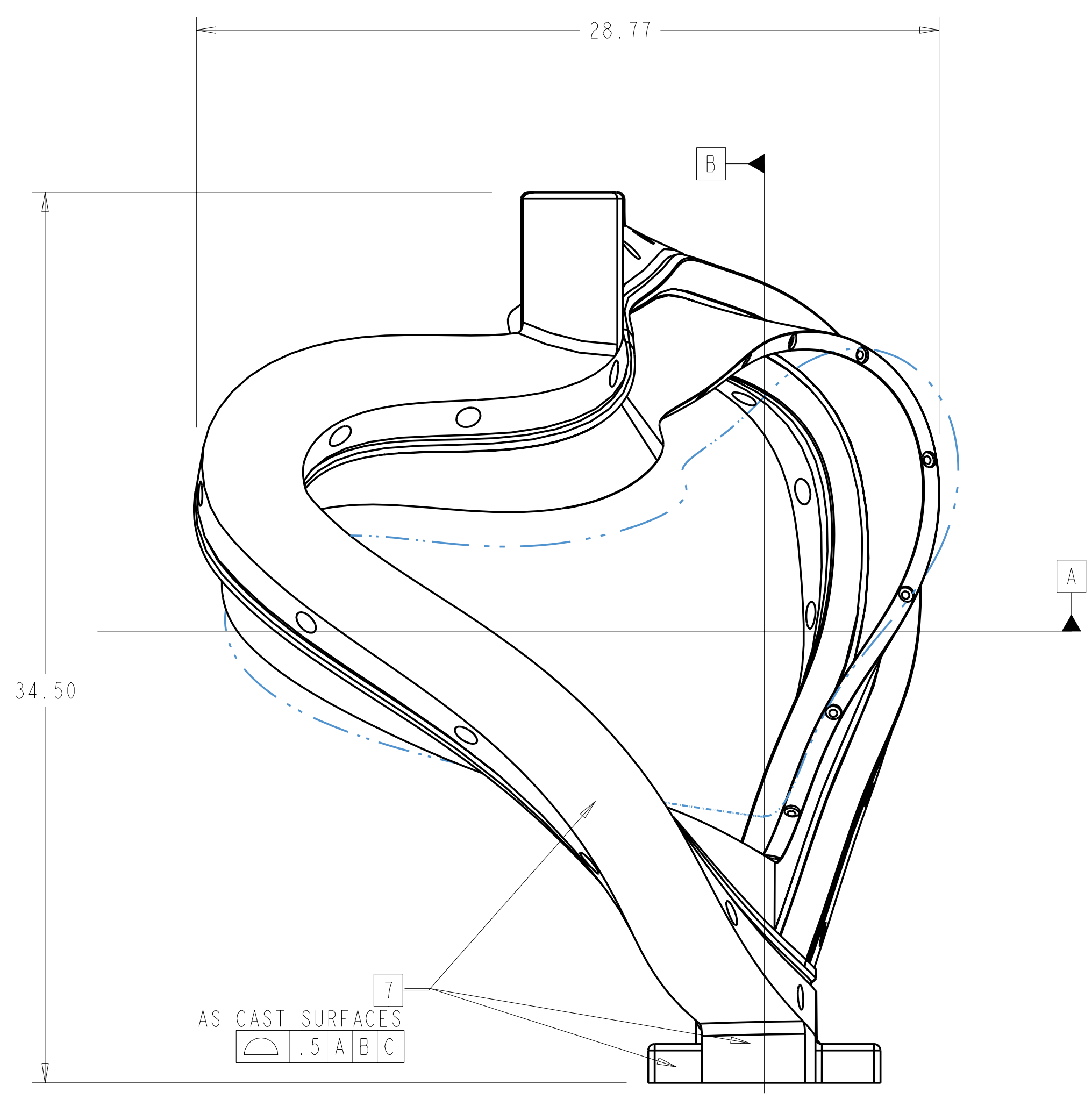
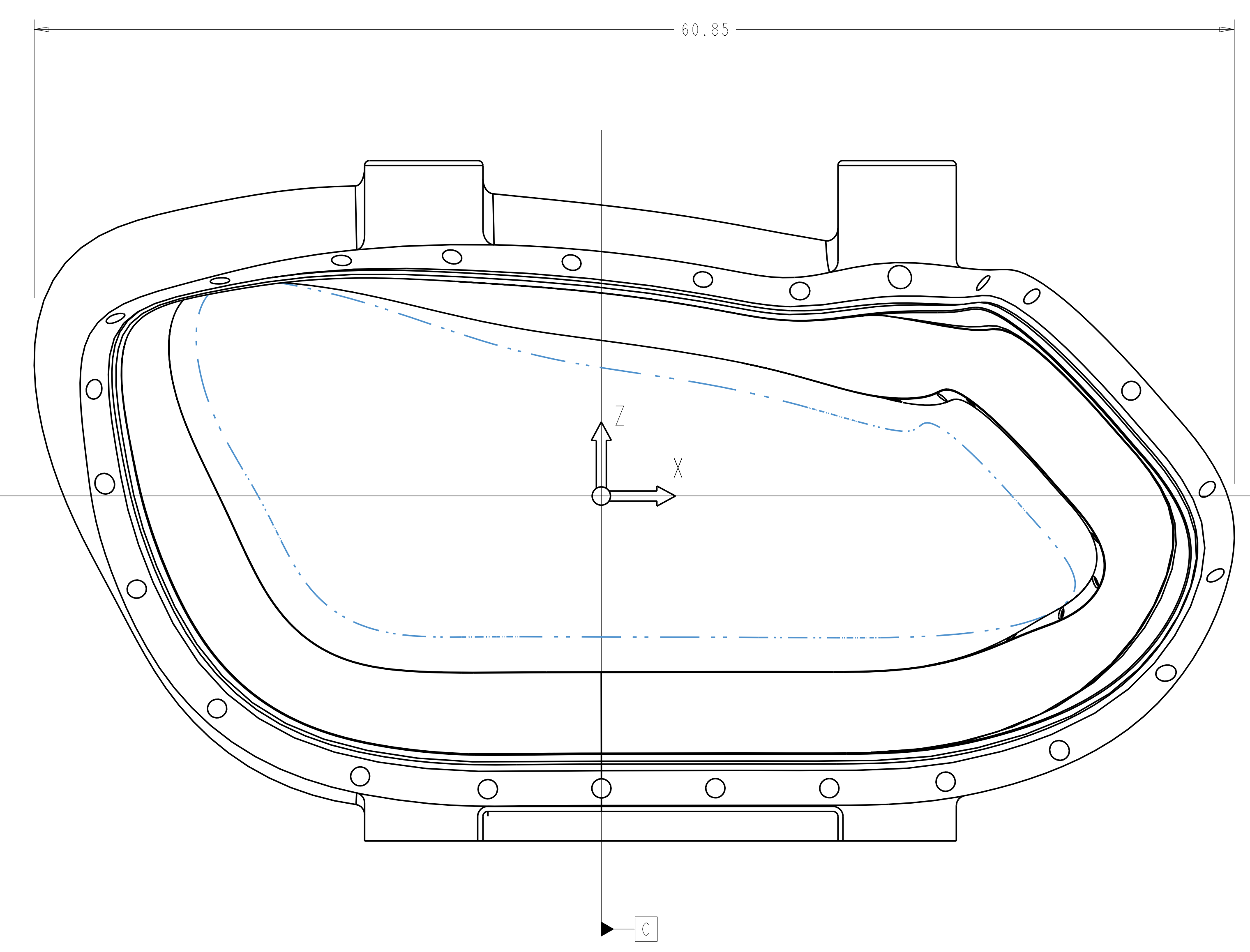


- NOTES:
1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M
 2. DIMENSIONS ARE IN INCHES
 3. DIMENSIONS APPLY AT ROOM TEMPERATURE. OPERATING TEMP 80 K.
 4. GEOMETRY IS DEFINED IN PRO ENGINEER CAD MODELS/FILES SEI40-084.PRT.1
 5. DRAWING AND MODELS COMBINED DEFINE FINISHED MACHINED PART.
 6. MACHINE FINISHED SURFACES TO CAD DATA, PROFILE WITHIN 0.020" UNLESS OTHERWISE SPECIFIED. PROFILE TOLERANCE IS BILATERAL, I.E. 0.010" EITHER SIDE OF THE REFERENCE SURFACE.
 7. AS-CAST SURFACES SHOWN IN NOMINAL MATERIAL CONDITION, THICKNESS TOLERANCE +/- 0.25. SURFACE PROFILE MUST BE WITHIN 0.5 INCHES OF CAD DATA, EXCEPT IN REGIONS OF INTERSECTING SURFACES WHERE FILLETS ARE EXPECTED.
 8. SEE SPECIFICATION, NCSX-CSPEC 141-02-00 FOR ADDITIONAL REQUIREMENTS.
 9. SEE SPECIFICATION NCSX-CSPEC 141-02-00 SECTION 3.2.1.1 FOR MATERIAL REQUIREMENTS.



DATUM A = PLANE THRU "XY"
 DATUM B = PLANE THRU "XZ"
 DATUM C = PLANE THRU "YZ"



ISOMETRIC VIEW

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE

SEI40-080	SEI40-084	WINDING FORM	SEE NOTE 9	SEE NOTE 8	-1
CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
←	NEXT ASSEMBLY	PARTS LIST			

APPROXIMATE WEIGHT = 725 LBS

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF, ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

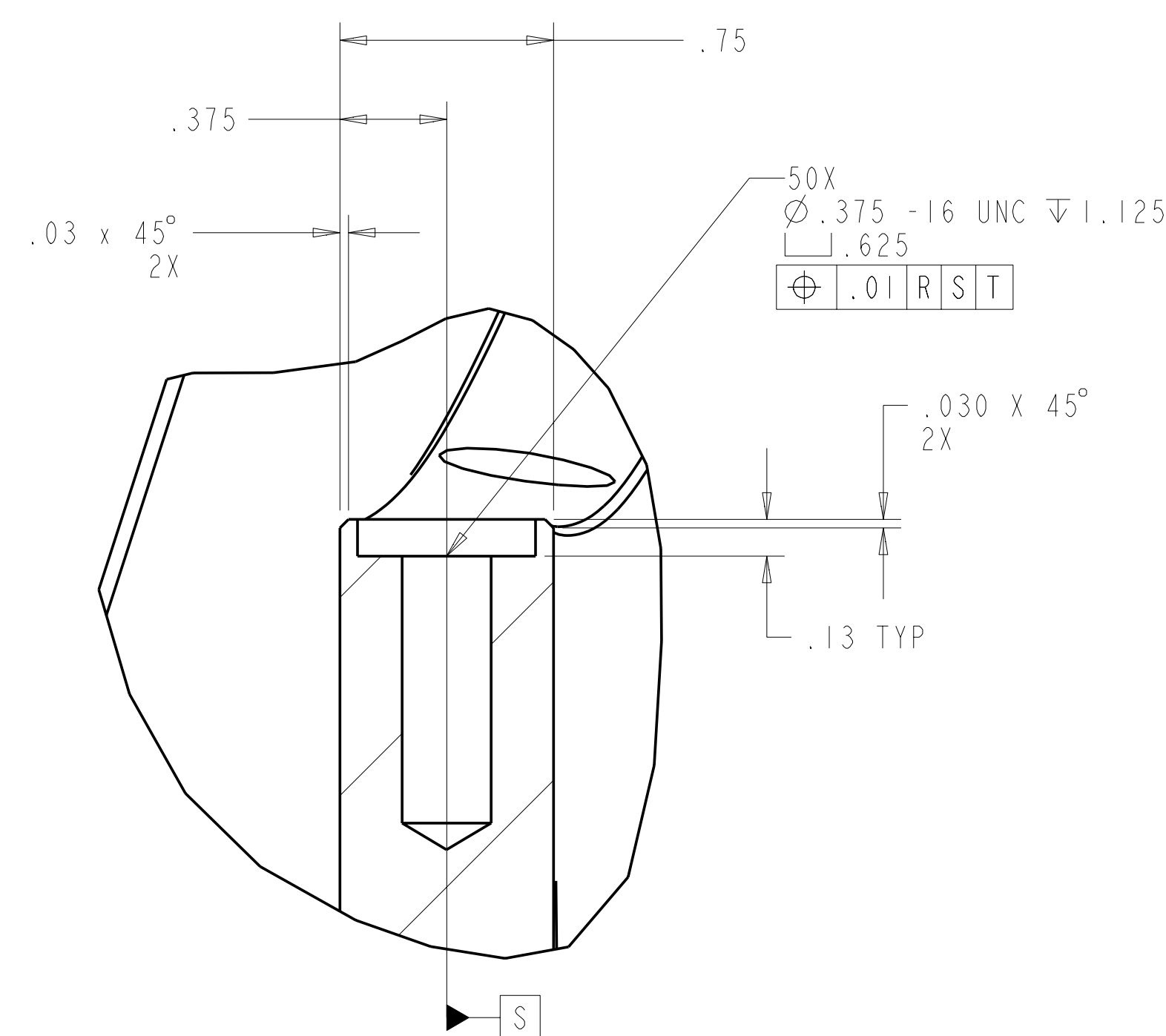
P THIS DRAWING PRODUCED ON PRO-ENGINEER

SCALE .250 UNO	DES DAVID WILLIAMSON 11-03-03	UT-BATTELLE Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee PRODUCT NAME NATIONAL COMPACT STELLARATOR EXPERIMENT TWISTED RACETRACK WINDING FORM										
TOLERANCES UNLESS OTHERWISE SPECIFIED	DRW GARY LOVETT 11-03-03											
FRACTIONS	CHK : SECT : DEPT :											
XX DECIMALS ±.04 XXX DECIMALS ±.005 ANGLES ±0°15'	PE : CR : PJ : RD :											
FINISH .125 UNLESS OTHERWISE SPECIFIED	PPPL DRFT : : : : : : :	VERSION NO. : PLANT : BLDG : FL : SHT OF : TYPE : CLASS : RELEASE LEVEL : WIP :										
REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE

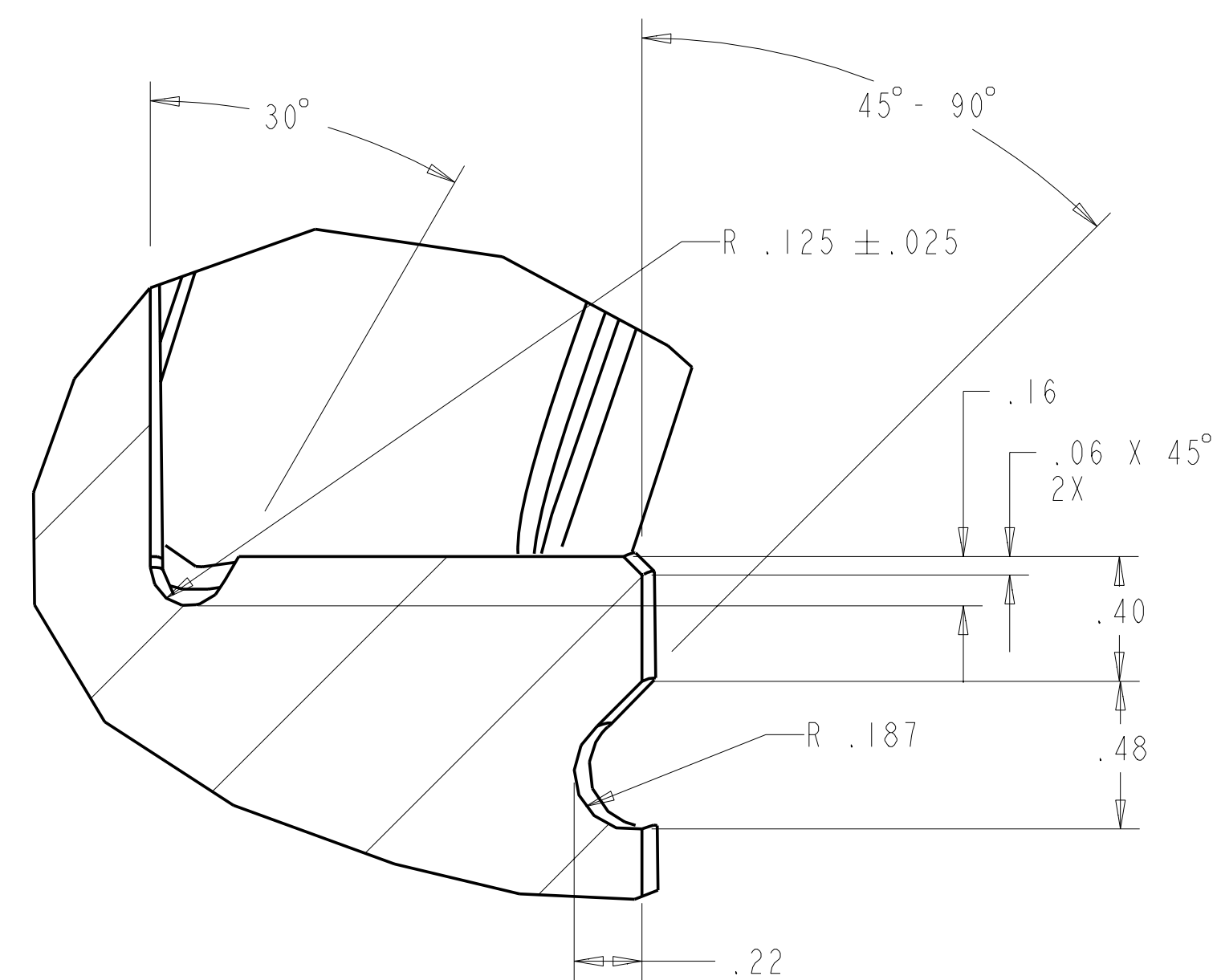
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SEI40-084

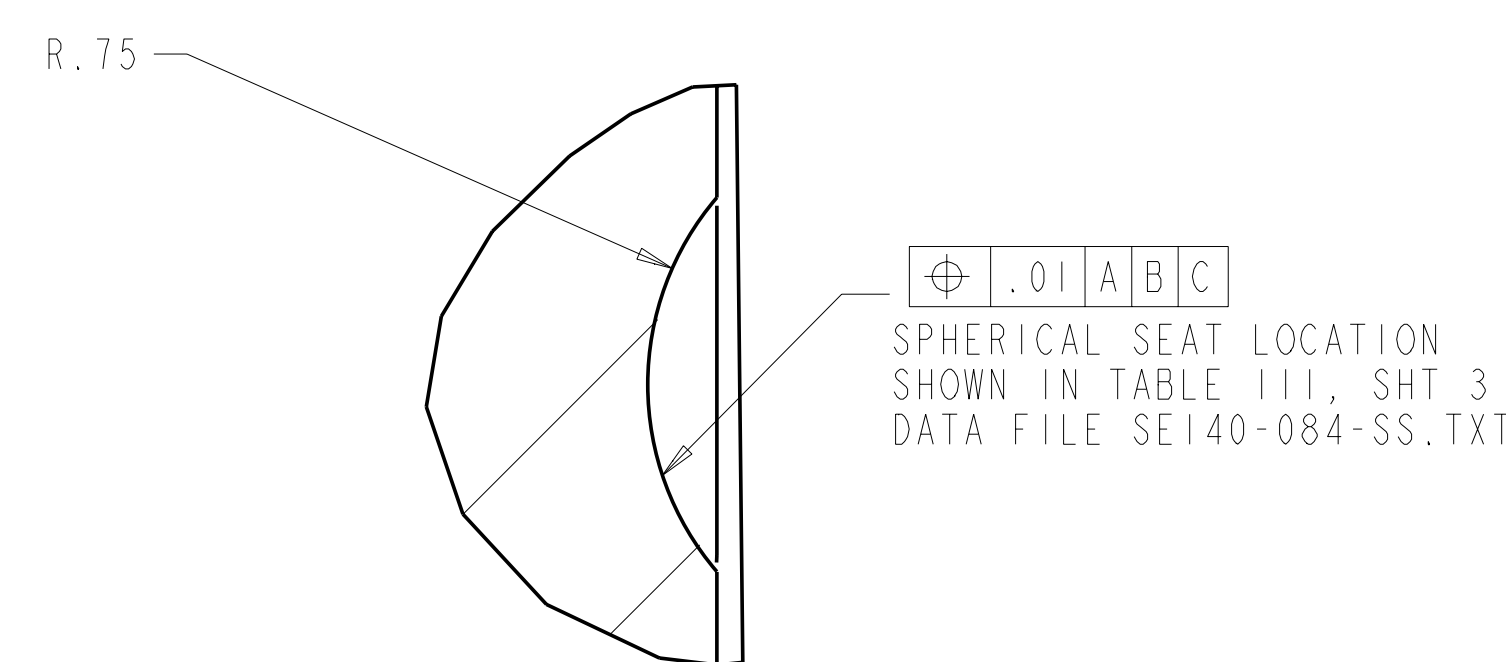
A



DETAIL 1
SCALE 2.0

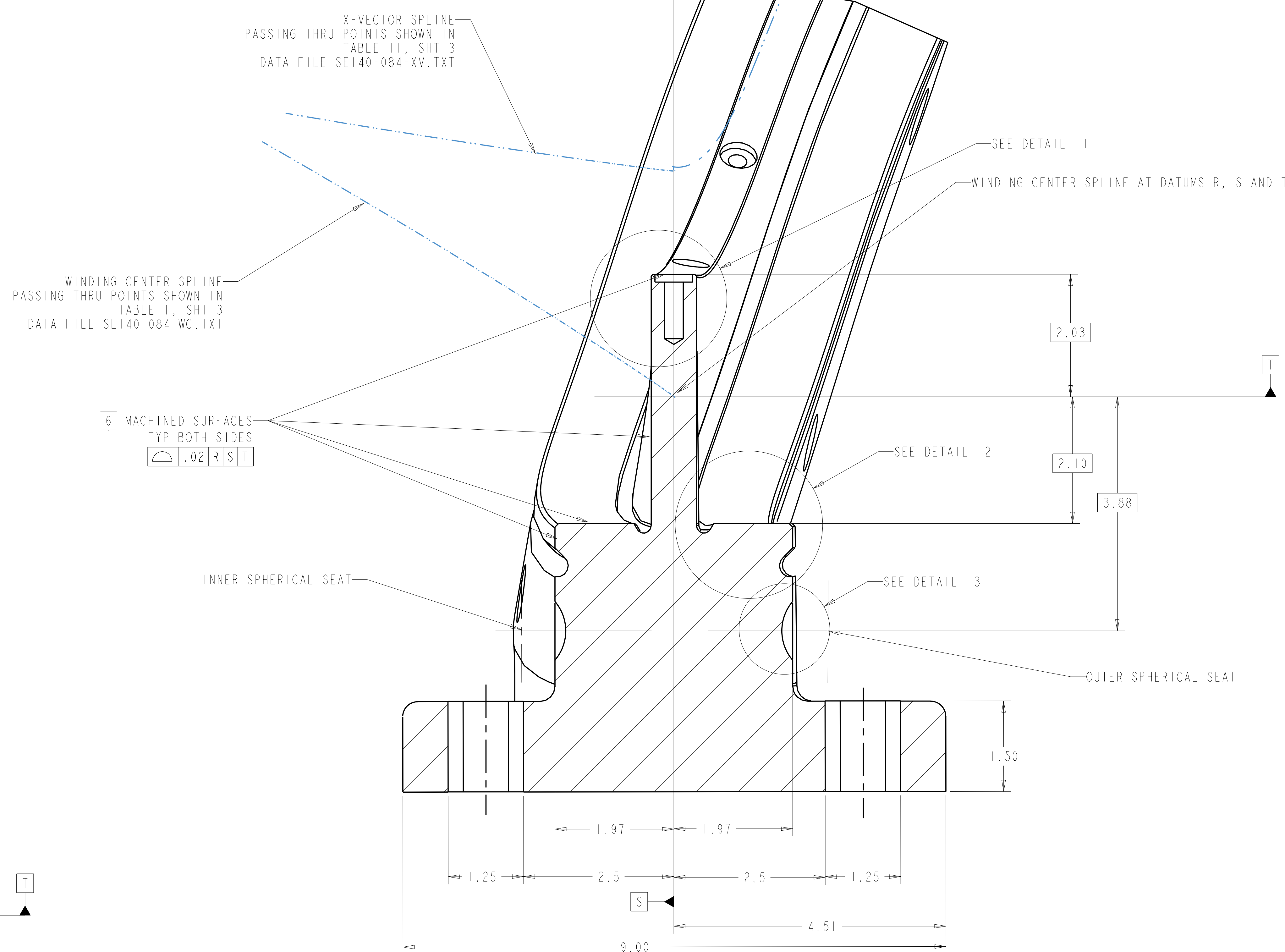


DETAIL 2
SCALE 2.0

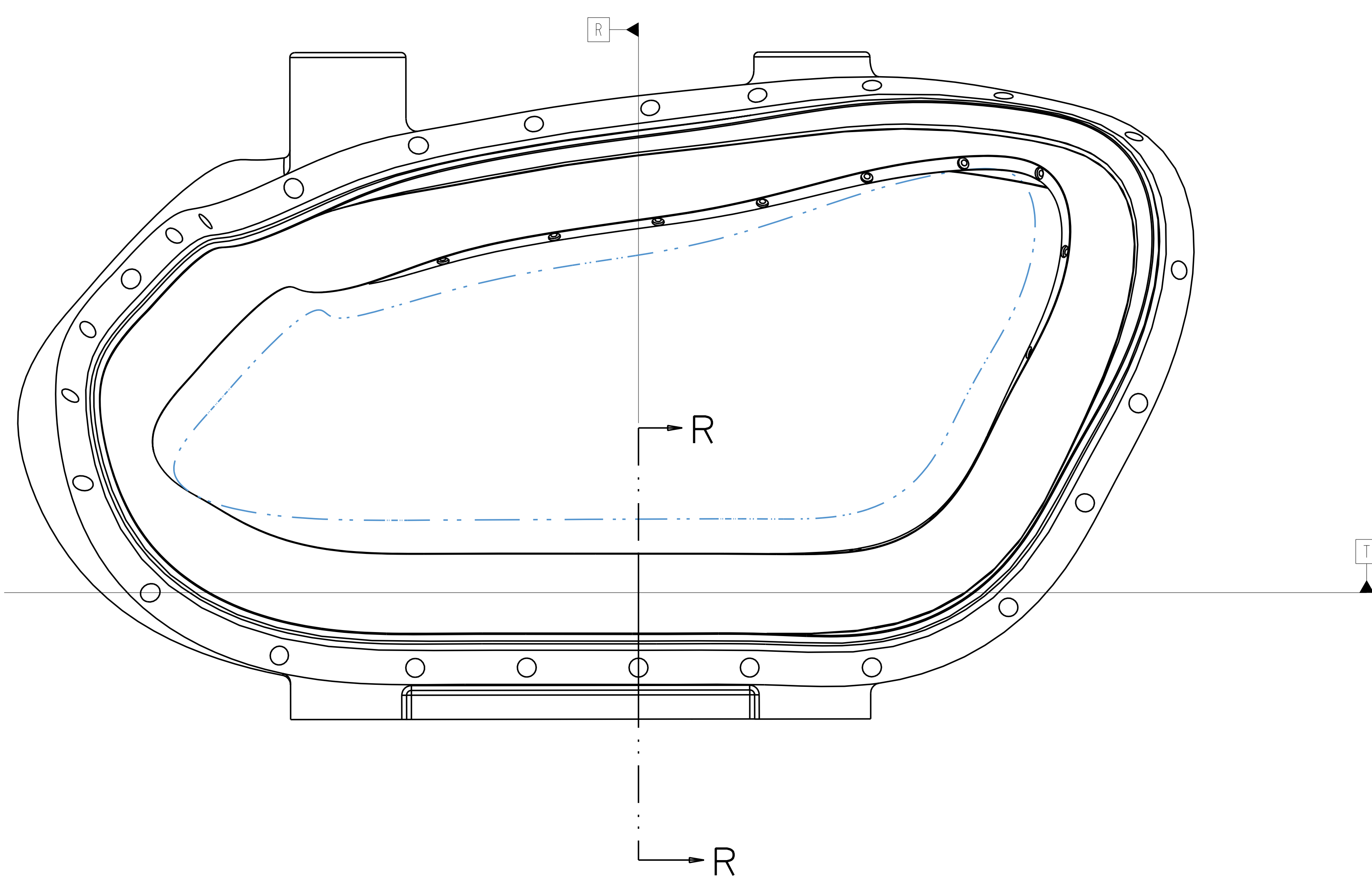


DETAIL 3
SCALE 2.0

DATUM R = PLANE NORMAL TO WINDING CENTER
 DATUM S = PLANE PASSING THRU WINDING CENTER AND X-VECTOR AT DATUM R
 DATUM T = PLANE PASSING THRU WINDING CENTER ORTHOGONAL TO DATUM S



SECTION R-R
SCALE 1.0



Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee PROJECT NAME							
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT							
TWISTED RACETRACK WINDING FORM							
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS	
5	X-10	5700	3	2 3	S	U	
RELEASE LEVEL	SE140-084						REV
WIP							-

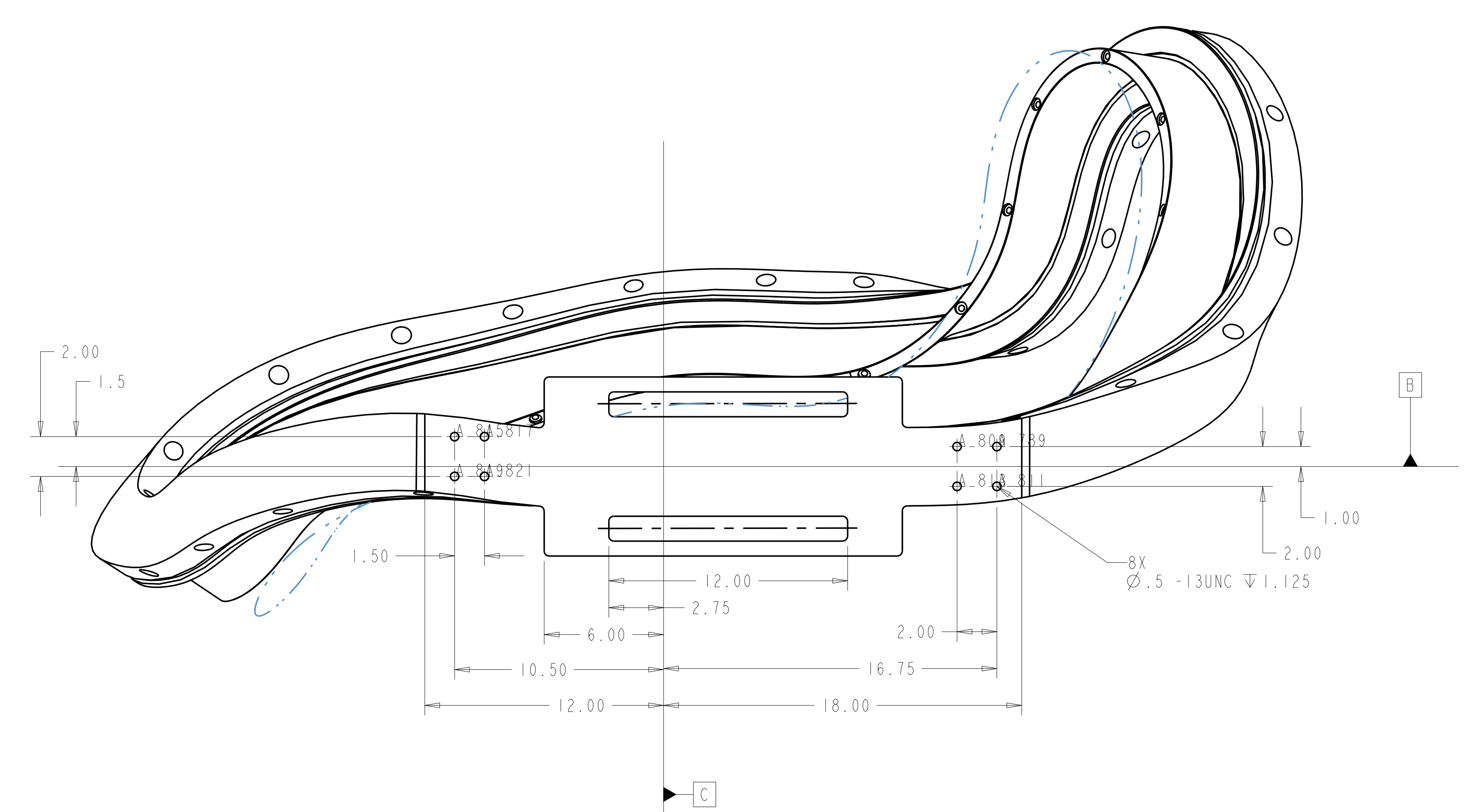
B SE140-084

FOR GENERAL NOTES AND PARTS LIST, SEE SHEET 1

TABLE I
 WINDING CENTER SPLINE CO-ORDINATE DATA FILE
 (FILE SE140-084-WC.TXT)

TABLE II
 X VECTOR CURVE CO-ORDINATE DATA FILE
 (FILE SE140-084-XV.TXT)

TABLE III
 SPHERICAL SEAT LOCATION CO-ORDINATES
 (FILE SE140-084-SS.TXT)



Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee PROJECT NAME						
UT-BATTELLE NATIONAL COMPACT STELLARATOR EXPERIMENT						
TWISTED RACETRACK WINDING FORM						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
5	X-10	5700	3	3 3	S	U
RELEASE LEVEL	SE140-084					REV
WIP						-

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 SE140-084