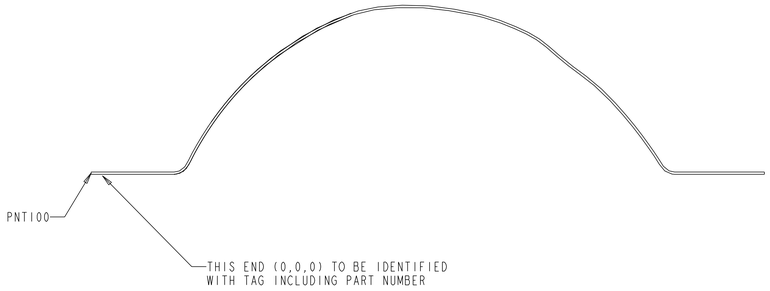
NEXT ASS'Y: | FINAL ASS'Y:

NOTES

1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
2. DIMENSIONS ARE IN INCHES.
3. FABRICATION AND MATERIALS PER NCSX-CSPEC-123-01
4. PROFILE TOLERANCE OF TUBE SURFACE IS BILATERAL, I.E. 0.156" ANY DIRECTION OFF REFERENCE SURFACE.
5. ALL TUBE BEND RADII ARE 5/8" TO CENTERLINE OF TUBE.
6. DATUM POINTS ON CHART ARE THEORETICAL INTERCEPTS OF THE TUBE CENTERLINE. BEND RADII ARE OMMITTED. PROFILE TOLERENCE INCLUDES ALLOWANCES FOR THE RADII ERRORS.

Point Name	X	Y	Z
PNT100	0.000	0.000	0.000
PNT101	11.338	0.000	-0.000
PNT102	11.994	0.106	-0.000
PNT103	12.666	0.489	-0.000
PNT104	13.138	1.101	-0.000
PNT105	13.813	2.425	-0.000
PNT106	14.489	3.654	-0.000
PNT107	15.248	4.931	-0.000
PNT108	16.050	6.182	-0.000
PNT109	16.814	7.292	0.009
PNT110	17.559	8.314	0.048
PNT111	18.546	9.570	0.095
PNT112	19.405	10.586	0.134
PNT113	20.253	11.525	0.170
PNT114	21.036	12.341	0.202
PNT115	21.890	13.181	0.234
PNT116	22.621	13.862	0.261
PNT117	23.368	14.524	0.287
PNT118	24.235	15.251	0.316
PNT119	25.069	15.913	0.342
PNT120	25.920	16.553	0.368
PNT121	26.733	17.132	0.391
PNT122	27.672	17.764	0.418
PNT123	28.628	18.370	0.442
PNT124	29.715	19.016	0.466
PNT125	30.822	19.628	0.491
PNT126	32.187	20.319	0.546
PNT127	33.700	21.000	0.677
PNT128	34.926	21.481	0.869
PNT129	36.217	21.914	1.186
PNT130	37.549	22.269	1.677
PNT131	38.982	22.530	2.476
PNT132	40.222	22.649	3.366
PNT133	41.875	22.760	4.214
PNT134	43.328	22.805	4.692
PNT135	44.894	22.780	5.003
PNT136	46.682	22.648	5.112
PNT137	48.328	22.444	4.986
PNT138	49.614	22.241	4.714
PNT139	50.729	22.050	4.320
PNT140	51.934	21.821	3.800
PNT141	53.071	21.564	3.310
PNT142	54.441	21.189	2.739
PNT143	55.748	20.761	2.234
PNT144	57.113	20.229	1.788
PNT145	58.044	19.830	1.459
PNT146	58.834	19.482	1.109
PNT147	59.504	19.168	0.807
PNT148	60.239	18.785	0.559
PNT149	60.863	18.412	0.491
PNT150	61.562	17.927	0.635
PNT151	62.276	17.352	1.027
PNT152	62.894	16.810	1.466
PNT153	63.581	16.207	1.866
PNT154	64.424	15.500	2.125
PNT155	65.356	14.752	2.176
PNT156	66.035	14.229	2.058
PNT157	66.946	13.566	1.657
PNT158	67.845	12.903	1.145
PNT159	68.653	12.250	0.751
PNT160	69.468	11.538	0.442
PNT161	70.282	10.766	0.241
PNT162	71.232	9.786	0.154
PNT163	72.199	8.720	0.138
PNT164	73.123	7.654	0.095
PNT165	74.074	6.500	0.048
PNT166	75.010	5.299	-0.000
PNT167	75.794	4.236	-0.000
PNT168	76.461	3.293	-0.000
PNT169	77.065	2.405	0.000
PNT170	77.563	1.647	0.000
PNT171	78.018	0.934	-0.000
PNT172	78.408	0.487	-0.000
PNT173	79.023	0.126	-0.000
PNT174	79.726	-0.000	-0.000
PNT175	92.000	0.000	0.000



-1 COOLANT TUBE 2-2

SCALE .125

APPROX TUBE LENGTH = 112.3 IN

3	AR			-1	COOLANT TUBE 2-2	316L SS 5/16"-.032 WALL	SEE NOTE 4	1
SE123-070	-1	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
		← NEXT ASSEMBLY		PARTS LIST			

SE123-072 B

RELEASED FOR FABRICATION / INSTALLATION

PPPL Drafting: ? Jerry Siegel 2005.06.24 13:17:45 -05'00'

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
1	⚠ PER ECN NO. 5003	MJC	6/24/05	PLG								

REVISION OR ISSUE PURPOSE — REVISION APPROVAL

SCALE NOTED

TOLERANCES UNLESS OTHERWISE SPECIFIED

FRACTIONS :
XX DECIMALS ±.01
XXX DECIMALS ±.005
ANGLES ±0°15'
BREAK SHARP EDGES .06 MAX
FINISH 125 UNLESS OTHERWISE SPECIFIED

DRAWING APPROVALS		DATE
DES	P GORANSON	4-22-05
DRW	G MCGINNIS	4-22-05
CHK	G.H. JONES	05-04-05
SECT	:	:
DEPT	:	:
PE	:	:
CR	:	:
PJ	:	:
REQ	:	:
PPPL DRFT	:	:
	:	:
	:	:

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

PROJECT NAME: NATIONAL COMPACT STELLARATOR EXPERIMENT

VACUUM VESSEL HEATING/COOLING COOLANT TUBE 2-2 DETAIL

VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
0	ORNL	5700	3	1	1	S	U

RELEASE LEVEL: Fabrication — SE123-072 — REV 1

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