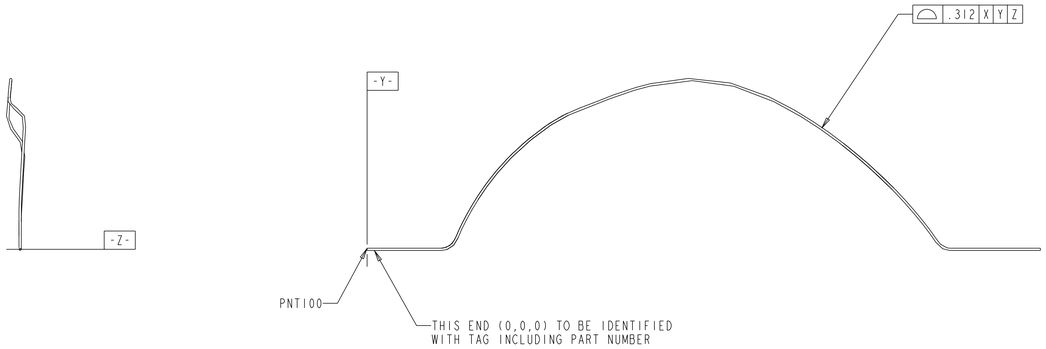
NEXT ASS'Y: FINAL ASS'Y:

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	10.128	-0.000	0.000
PNT102	10.863	0.121	0.000
PNT103	11.611	0.557	0.000
PNT104	12.111	1.264	0.000
PNT105	12.641	2.481	-0.000
PNT106	13.069	3.380	0.000
PNT107	13.640	4.486	0.000
PNT108	14.208	5.499	0.000
PNT109	14.802	6.487	0.015
PNT110	15.318	7.306	0.060
PNT111	15.820	8.055	0.101
PNT112	16.305	8.739	0.139
PNT113	16.806	9.411	0.175
PNT114	17.445	10.221	0.219
PNT115	18.194	11.108	0.267
PNT116	18.840	11.828	0.305
PNT117	19.643	12.667	0.351
PNT118	20.379	13.389	0.393
PNT119	21.090	14.046	0.429
PNT120	22.067	14.888	0.470
PNT121	22.872	15.535	0.497
PNT122	23.642	16.120	0.530
PNT123	24.477	16.725	0.591
PNT124	25.170	17.197	0.632
PNT125	25.881	17.641	0.610
PNT126	26.605	18.047	0.494
PNT127	27.276	18.385	0.307
PNT128	27.887	18.666	0.078
PNT129	28.489	18.920	-0.197
PNT130	29.028	19.130	-0.483
PNT131	29.614	19.344	-0.822
PNT132	30.221	19.570	-1.112
PNT133	30.795	19.793	-1.304
PNT134	31.441	20.049	-1.450
PNT135	32.096	20.311	-1.528
PNT136	32.874	20.623	-1.538
PNT137	33.716	20.950	-1.503
PNT138	34.748	21.322	-1.466
PNT139	35.727	21.648	-1.433
PNT140	36.901	22.002	-1.396
PNT141	37.960	22.287	-1.367
PNT142	39.090	22.552	-1.341
PNT143	40.293	22.790	-1.317
PNT144	41.569	22.988	-1.297
PNT145	43.045	23.141	-1.282
PNT146	44.334	23.201	-1.276
PNT147	45.689	23.176	-1.279
PNT148	47.295	23.019	-1.293
PNT149	48.946	22.725	-1.320
PNT150	50.447	22.345	-1.353
PNT151	52.106	21.812	-1.399
PNT152	53.790	21.160	-1.455
PNT153	55.320	20.475	-1.515
PNT154	56.761	19.751	-1.579
PNT155	58.341	18.877	-1.657
PNT156	59.447	18.214	-1.706
PNT157	60.591	17.494	-1.622
PNT158	61.542	16.871	-1.387
PNT159	62.446	16.255	-0.998
PNT160	63.245	15.689	-0.504
PNT161	64.298	14.908	0.039
PNT162	65.183	14.222	0.347
PNT163	66.383	13.257	0.517
PNT164	67.310	12.485	0.477
PNT165	68.176	11.742	0.399
PNT166	69.307	10.734	0.338
PNT167	70.392	9.721	0.297
PNT168	71.540	8.597	0.236
PNT169	72.553	7.555	0.178
PNT170	73.519	6.511	0.123
PNT171	74.418	5.492	0.067
PNT172	75.445	4.261	0.000
PNT173	76.371	3.089	0.000
PNT174	77.311	1.824	0.000
PNT175	77.979	0.873	0.000
PNT176	78.375	0.445	0.000
PNT177	78.968	0.115	0.000
PNT178	79.631	-0.000	0.000
PNT179	92.000	0.000	0.000



RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting: ? Jerry Siegel 2005.06.24 13:18:31 -05'00'

APPROX TUBE LENGTH = 110.6 IN

3	AR	X		-1	COOLANT TUBE 3-1	316L SS 5/16"-.032 WALL	SEE NOTE 4	1
SE123-075	-		CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
			NEXT ASSEMBLY		PARTS LIST			

SE123-076 B

-1 COOLANT TUBE 3-1
SCALE .125

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	:	:
	:	:
	:	:

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UT-BATTELLE, LLC. Oak Ridge, Tennessee

PROJECT NAME
NATIONAL COMPACT STELLARATOR EXPERIMENT

VACUUM VESSEL HEATING/COOLING COOLANT TUBE 3-1 DETAIL

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

RELEASE LEVEL: Fabrication
SE123-076 REV 1

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