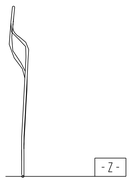
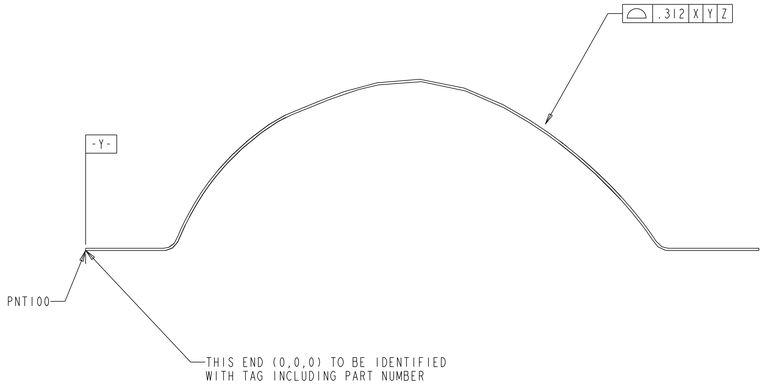
NEXT ASS'Y: | FINAL ASS'Y:

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	10.658	0.000	-0.000
PNT102	11.349	0.114	-0.000
PNT103	12.048	0.533	0.000
PNT104	12.508	1.206	-0.000
PNT105	13.025	2.422	-0.000
PNT106	13.443	3.320	-0.000
PNT107	14.004	4.424	-0.000
PNT108	14.562	5.436	0.000
PNT109	15.155	6.466	0.065
PNT110	15.664	7.282	0.108
PNT111	16.161	8.030	0.148
PNT112	16.640	8.712	0.184
PNT113	17.137	9.382	0.219
PNT114	17.771	10.190	0.262
PNT115	18.514	11.074	0.308
PNT116	19.156	11.790	0.345
PNT117	19.954	12.626	0.390
PNT118	20.686	13.345	0.430
PNT119	21.392	13.999	0.465
PNT120	22.364	14.838	0.504
PNT121	23.164	15.482	0.530
PNT122	23.929	16.065	0.563
PNT123	24.758	16.669	0.625
PNT124	25.447	17.138	0.659
PNT125	26.156	17.576	0.613
PNT126	26.874	17.968	0.450
PNT127	27.533	18.290	0.215
PNT128	28.128	18.555	-0.058
PNT129	28.711	18.791	-0.378
PNT130	29.237	18.993	-0.686
PNT131	29.836	19.227	-0.978
PNT132	30.456	19.478	-1.203
PNT133	31.033	19.715	-1.354
PNT134	31.678	19.980	-1.467
PNT135	32.329	20.248	-1.520
PNT136	33.102	20.564	-1.519
PNT137	33.938	20.892	-1.484
PNT138	34.963	21.265	-1.449
PNT139	35.937	21.591	-1.417
PNT140	37.104	21.944	-1.382
PNT141	38.158	22.227	-1.354
PNT142	39.283	22.490	-1.328
PNT143	40.480	22.724	-1.306
PNT144	41.749	22.917	-1.287
PNT145	43.219	23.061	-1.273
PNT146	44.502	23.111	-1.268
PNT147	45.850	23.073	-1.272
PNT148	47.446	22.905	-1.288
PNT149	49.087	22.606	-1.317
PNT150	50.580	22.226	-1.353
PNT151	52.232	21.701	-1.402
PNT152	53.911	21.062	-1.461
PNT153	55.437	20.390	-1.523
PNT154	56.875	19.679	-1.590
PNT155	58.451	18.817	-1.671
PNT156	59.555	18.164	-1.710
PNT157	60.697	17.454	-1.616
PNT158	61.648	16.838	-1.393
PNT159	62.561	16.224	-1.040
PNT160	63.371	15.660	-0.577
PNT161	64.409	14.903	0.009
PNT162	65.287	14.230	0.342
PNT163	66.445	13.305	0.512
PNT164	67.364	12.541	0.464
PNT165	68.222	11.803	0.389
PNT166	69.341	10.803	0.332
PNT167	70.415	9.797	0.290
PNT168	71.549	8.679	0.229
PNT169	72.549	7.642	0.172
PNT170	73.500	6.603	0.117
PNT171	74.385	5.587	0.062
PNT172	75.442	4.299	-0.000
PNT173	76.352	3.123	-0.000
PNT174	77.271	1.852	0.000
PNT175	77.922	0.897	0.000
PNT176	78.315	0.459	-0.000
PNT177	78.909	0.119	-0.000
PNT178	79.583	-0.000	-0.000
PNT179	92.000	0.000	0.000





RELEASED FOR FABRICATION / INSTALLATION

PPPL Drafting: ? Jerry Siegel 2005.06.24 13:19:23 -05'00'

APPROX TUBE LENGTH = 110.6 IN

3	AR	X		-1	COOLANT TUBE 3-2	316L SS 5/16"-.032 WALL	SEE NOTE 4	1
SE123-075	-1		CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
			NEXT ASSEMBLY	PARTS LIST				

SE123-077 B

-1 COOLANT TUBE 3-2

SCALE .125

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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 3-2 DETAIL

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

RELEASE LEVEL: Fabrication

SE123-077 REV 1