'[0/90/90/s] gamma=.001'

Laminate Stacking Sequence

Material Type	Lamina Thickness	Lamina Angle
1	25.000000E-03	0.0000
1	25.000000E-03	90.0000
1	25.000000E-03	90.0000
1	25.000000E-03	0.0000

NRANK= 10
Ri= 30.000000E+00

Material T300/5208 ENG
E1= 19.20E+06 E2= 1.56E+06 G12= 820.00E+03 PR12=0.2400 PR23=0.5900
alpha1= -0.43E-06 alpha2= 0.14E-04

Px= 0.000000E+00
gammaxt= 1.000000E-03
Pin= 0.000000E+00
Pout= 0.000000E+00
delta T= 0.000000E+00

3D Stiffness Matrix C

0.1965E+08	0.9345E+06	0.9345E+06	0.0000E+00	0.0000E+00	0.0000E+00
0.9345E+06	0.2437E+07	0.1456E+07	0.0000E+00	0.0000E+00	0.0000E+00
0.9345E+06	0.1456E+07	0.2437E+07	0.0000E+00	0.0000E+00	0.0000E+00
0.0000E+00	0.0000E+00	0.0000E+00	0.4906E+06	0.0000E+00	0.0000E+00
0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.8200E+06	0.0000E+00
0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.8200E+06

Layer # 1
C Bar Matrix

0.20E+08	0.93E+06	0.93E+06	0.00E+00	0.00E+00	0.00E+00
0.93E+06	0.24E+07	0.15E+07	0.00E+00	0.00E+00	0.00E+00
0.93E+06	0.15E+07	0.24E+07	0.00E+00	0.00E+00	-0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.49E+06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.82E+06	0.00E+00
0.00E+00	0.00E+00	-0.00E+00	0.00E+00	0.00E+00	0.82E+06

Off-axis CTE
1 -430.00E-09
2 13.60E-06

```
3      13.60E-06
4       0.00E+00
5       0.00E+00
6      -0.00E+00


Layer # 2
C Bar Matrix
   0.24E+07   0.93E+06   0.15E+07   0.00E+00   0.00E+00   0.84E-11
   0.93E+06   0.20E+08   0.93E+06   0.00E+00   0.00E+00   0.10E-08
   0.15E+07   0.93E+06   0.24E+07   0.00E+00   0.00E+00  -0.32E-10
   0.00E+00   0.00E+00   0.00E+00   0.82E+06   0.20E-10   0.00E+00
   0.00E+00   0.00E+00   0.00E+00   0.20E-10   0.49E+06   0.00E+00
   0.84E-11   0.10E-08  -0.32E-10   0.00E+00   0.00E+00   0.82E+06


Off-axis CTE
1      13.60E-06
2    -430.00E-09
3      13.60E-06
4       0.00E+00
5       0.00E+00
6      -1.72E-21



Layer # 3
C Bar Matrix
   0.24E+07   0.93E+06   0.15E+07   0.00E+00   0.00E+00   0.84E-11
   0.93E+06   0.20E+08   0.93E+06   0.00E+00   0.00E+00   0.10E-08
   0.15E+07   0.93E+06   0.24E+07   0.00E+00   0.00E+00  -0.32E-10
   0.00E+00   0.00E+00   0.00E+00   0.82E+06   0.20E-10   0.00E+00
   0.00E+00   0.00E+00   0.00E+00   0.20E-10   0.49E+06   0.00E+00
   0.84E-11   0.10E-08  -0.32E-10   0.00E+00   0.00E+00   0.82E+06


Off-axis CTE
1      13.60E-06
2    -430.00E-09
3      13.60E-06
4       0.00E+00
5       0.00E+00
6      -1.72E-21



Layer # 4
C Bar Matrix
   0.20E+08   0.93E+06   0.93E+06   0.00E+00   0.00E+00   0.00E+00
   0.93E+06   0.24E+07   0.15E+07   0.00E+00   0.00E+00   0.00E+00
   0.93E+06   0.15E+07   0.24E+07   0.00E+00   0.00E+00  -0.00E+00
   0.00E+00   0.00E+00   0.00E+00   0.49E+06   0.00E+00   0.00E+00
   0.00E+00   0.00E+00   0.00E+00   0.00E+00   0.82E+06   0.00E+00
   0.00E+00   0.00E+00  -0.00E+00   0.00E+00   0.00E+00   0.82E+06


Off-axis CTE
1    -430.00E-09
2      13.60E-06
3      13.60E-06
4       0.00E+00
5       0.00E+00
```

6 -0.00E+00

Lamina Constants

Lamina	lamda	Gamma	Omega	Sigmahat	Psi
1	0.100000E+01	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00
2	0.283921E+01	0.303184E-01	-0.112070E-15	0.355838E+02	-0.206749E-05
3	0.283921E+01	0.303184E-01	-0.112070E-15	0.355838E+02	-0.206749E-05
4	0.100000E+01	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00

Km Matrix

Rho & Elf Terms

Index	R	Elf
1	-0.5255E+02	0.0000E+00
2	0.6208E-04	-0.1010E-15
3	0.6971E+01	-0.2051E-10
4	0.0000E+00	-0.0000E+00
5	0.0000E+00	-0.0000E+00
6	-0.6218E-04	0.1014E-15
7	-0.6971E+01	0.2054E-10
8	-0.5255E+02	0.0000E+00
9	-0.7030E+03	0.1199E-09
10	0.2366E-13	-0.1398E+08

SOLUTION
epsx= 0.153915E-19
T= 0.139807E+08

w(Ri)= -4.585522097829419E-17

Lamina	r	epsilon r	epsilon t	gamma xt
1	0.300000E+02	0.907346E-18	-0.152851E-17	0.300000E-01
1	0.300125E+02	0.906331E-18	-0.152749E-17	0.300250E-01
1	0.300250E+02	0.905318E-18	-0.152648E-17	0.000000E+00
2	0.300250E+02	0.968808E-18	-0.152648E-17	0.300250E-01
2	0.300375E+02	0.968973E-18	-0.152544E-17	0.300500E-01
2	0.300500E+02	0.969143E-18	-0.152440E-17	0.000000E+00
3	0.300500E+02	0.969143E-18	-0.152440E-17	0.300500E-01
3	0.300625E+02	0.969319E-18	-0.152337E-17	0.300750E-01
3	0.300750E+02	0.969500E-18	-0.152233E-17	0.000000E+00
4	0.300750E+02	0.904467E-18	-0.152233E-17	0.300750E-01
4	0.300875E+02	0.903459E-18	-0.152132E-17	0.301000E-01
4	0.301000E+02	0.902452E-18	-0.152032E-17	0.000000E+00

Lamina	r	sigma x	sigma t	sigma r	tau xt
1	0.300000E+02	-0.278058E-12	-0.238989E-11	0.217528E-27	0.246000E+05
1	0.300125E+02	-0.278058E-12	-0.238890E-11	-0.995167E-15	0.246102E+05
1	0.300250E+02	-0.278058E-12	-0.238790E-11	-0.198909E-14	0.246205E+05

2	0.300250E+02	0.273872E-12	0.231624E-11	-0.198909E-14	0.246205E+05
2	0.300375E+02	0.275292E-12	0.236293E-11	-0.141676E-14	0.246308E+05
2	0.300500E+02	0.243344E-13	-0.290323E-10	0.960090E-12	0.246410E+05
3	0.300500E+02	0.276509E-12	0.238348E-11	-0.324774E-16	0.246410E+05
3	0.300625E+02	0.277944E-12	0.243015E-11	0.566188E-15	0.246512E+05
3	0.300750E+02	0.267919E-13	-0.289912E-10	0.962898E-12	0.246615E+05
4	0.300750E+02	-0.274976E-12	-0.237903E-11	0.197676E-14	0.246615E+05
4	0.300875E+02	-0.274976E-12	-0.237804E-11	0.987765E-15	0.246717E+05
4	0.301000E+02	-0.274976E-12	-0.237706E-11	-0.103341E-27	0.246820E+05

Row	Column	K(i,j)
1	1	0.389377E+07
1	2	-0.109015E+04
1	3	0.000000E+00
1	4	0.000000E+00
1	5	0.000000E+00
1	6	0.000000E+00
1	7	0.000000E+00
1	8	0.000000E+00
1	9	0.934505E+06
1	10	0.000000E+00
2	1	0.300250E+02
2	2	0.333056E-01
2	3	-0.156633E+05
2	4	-0.638434E-04
2	5	0.000000E+00
2	6	0.000000E+00
2	7	0.000000E+00
2	8	0.000000E+00
2	9	-0.910311E+00
2	10	0.101031E-12
3	1	0.389377E+07
3	2	-0.108833E+04
3	3	-0.409773E+10
3	4	0.127281E+02
3	5	0.000000E+00
3	6	0.000000E+00
3	7	0.000000E+00
3	8	0.000000E+00
3	9	-0.624047E+06
3	10	0.205074E-07
4	1	0.000000E+00
4	2	0.000000E+00
4	3	0.157004E+05
4	4	0.636927E-04
4	5	-0.157004E+05
4	6	-0.636927E-04
4	7	0.000000E+00
4	8	0.000000E+00
4	9	0.000000E+00
4	10	0.000000E+00
5	1	0.000000E+00
5	2	0.000000E+00
5	3	0.410401E+10
5	4	-0.126875E+02
5	5	-0.410401E+10
5	6	0.126875E+02
5	7	0.000000E+00
5	8	0.000000E+00
5	9	0.000000E+00
5	10	0.000000E+00
6	1	0.000000E+00
6	2	0.000000E+00

6	3	0.000000E+00
6	4	0.000000E+00
6	5	0.157375E+05
6	6	0.635425E-04
6	7	-0.300750E+02
6	8	-0.332502E-01
6	9	0.911827E+00
6	10	-0.101368E-12
7	1	0.000000E+00
7	2	0.000000E+00
7	3	0.000000E+00
7	4	0.000000E+00
7	5	0.411029E+10
7	6	-0.126471E+02
7	7	-0.389377E+07
7	8	0.108472E+04
7	9	0.624047E+06
7	10	-0.205415E-07
8	1	0.000000E+00
8	2	0.000000E+00
8	3	0.000000E+00
8	4	0.000000E+00
8	5	0.000000E+00
8	6	0.000000E+00
8	7	0.389377E+07
8	8	-0.108292E+04
8	9	0.934505E+06
8	10	0.000000E+00
9	1	0.881117E+07
9	2	0.000000E+00
9	3	0.124872E+11
9	4	-0.320562E+02
9	5	0.125167E+11
9	6	-0.319806E+02
9	7	0.883319E+07
9	8	0.000000E+00
9	9	0.209187E+09
9	10	-0.119930E-06
10	1	0.000000E+00
10	2	0.000000E+00
10	3	0.706421E-04
10	4	0.341844E-12
10	5	0.708681E-04
10	6	0.341321E-12
10	7	0.000000E+00
10	8	0.000000E+00
10	9	0.110977E-07
10	10	0.139807E+11