Generated by lamprop 2.beta-13-gea1dfd8

laminate: atlac430-CSM450

thickness: 3.22 mm, density: 1.45 g/cm³

fiber volume fraction: 22.0%, fiber weight fraction: 38.5%

laminate weight: 4677 g/m², resin consumption: 2877 g/m²

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| num | weight | angle | vf | fiber |
| 1 | 150 | 0 | 0,22 | e-glas |
| 2 | 150 | 60 | 0,22 | e-glas |
| 3 | 150 | -60 | 0,22 | e-glas |
| 4 | 150 | 0 | 0,22 | e-glas |
| 5 | 150 | 60 | 0,22 | e-glas |
| 6 | 150 | -60 | 0,22 | e-glas |
| 7 | 150 | 0 | 0,22 | e-glas |
| 8 | 150 | 60 | 0,22 | e-glas |
| 9 | 150 | -60 | 0,22 | e-glas |
| 10 | 150 | 0 | 0,22 | e-glas |
| 11 | 150 | 60 | 0,22 | e-glas |
| 12 | 150 | -60 | 0,22 | e-glas |

E\_x = 14112 MPa

E\_y = 14117 MPa

G\_xy = 5672 MPa

ν\_xy = 0.24548

ν\_yx = 0.24557

α\_x = 3.196e-05 K⁻¹, α\_y = 3.194e-05 K⁻¹

Stiffness (ABD) matrix:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4.8470e+04 | 1.1910e+04 | 0.0000 | -1.8105e+03 | 1.1881e+02 | -4.1975e+02 |
| 1.1910e+04 | 4.8470e+04 | 0.0000 | 1.1881e+02 | 1.5729e+03 | -5.5694e+02 |
| 0.0000 | 0.0000 | 1.8280e+04 | -4.1975e+02 | -5.5694e+02 | 1.1881e+02 |
| -1.8105e+03 | 1.1881e+02 | -4.1975e+02 | 4.2072e+04 | 1.0288e+04 | -1.1267e+02 |
| 1.1881e+02 | 1.5729e+03 | -5.5694e+02 | 1.0288e+04 | 4.1770e+04 | -1.4950e+02 |
| -4.1975e+02 | -5.5694e+02 | 1.1881e+02 | -1.1267e+02 | -1.4950e+02 | 1.5795e+04 |

Compliance (abd) matrix:

| 2.1999e-05 -5.4004e-06 1.7010e-08 9.8784e-07 -1.0087e-07 4.0016e-07|

|-5.4004e-06 2.1991e-05 -3.0322e-08 -1.0091e-07 -7.8606e-07 6.2397e-07|

| 1.7010e-08 -3.0322e-08 5.4737e-05 3.9101e-07 6.3318e-07 -4.0355e-07|

| 9.8784e-07 -1.0091e-07 3.9101e-07 2.5340e-05 -6.2347e-06 1.4151e-07|

|-1.0087e-07 -7.8606e-07 6.3318e-07 -6.2347e-06 2.5515e-05 1.6187e-07|

| 4.0016e-07 6.2397e-07 -4.0355e-07 1.4151e-07 1.6187e-07 6.3348e-05|