**APÉNDICE J**

**TABLA J1.**

ERRORES DE DATOS EXPERIMENTALES Vs DATOS TEÓRICOS GENERADOS POR LA SIMULACIÓN POR COMPUTADORA, 10% ZEOLITA.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **G1 - 10%** | **DEFORMACIÓN** | **ESFUERZO EXPERIMENTAL [Mpa]** | **ESFUERZO TEÓRICO [Mpa]** | **ESFUERZO MÁXIMO RUPTURA EXPERIMENTAL** | **ESFUERZO MÁXIMO RUPTURA TEÓRICO** | **ERROR PARA CADA PUNTO** | **ERROR PARA RUPTURA** |
| DÍA 7 | 0.000000 | 0.000000 | 0.000000 | 86.999819 | 86.91 | 0% | 0.0010 |
| 0.002495 | 0.996085 | 6.329600 | 84% |
| 0.004990 | 2.496517 | 12.659100 | 80% |
| 0.007485 | 6.367378 | 18.988700 | 66% |
| 0.009980 | 10.616500 | 25.318200 | 58% |
| 0.012475 | 15.886923 | 31.647800 | 50% |
| 0.014971 | 23.956472 | 37.977300 | 37% |
| 0.017466 | 31.962977 | 44.293100 | 28% |
| 0.019961 | 40.473829 | 50.540100 | 20% |
| 0.022456 | 48.480334 | 56.706200 | 15% |
| 0.024951 | 56.171622 | 62.774400 | 11% |
| 0.027446 | 63.043347 | 68.711200 | 8% |
| 0.029941 | 71.743329 | 74.450100 | 4% |
| 0.032436 | 77.228100 | 79.845600 | 3% |
| 0.034931 | 80.853092 | 84.503600 | 4% |
| 0.037426 | 86.999819 | 86.910900 | 0% |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| DÍA 14 | 0.000000 | 0.000000 | 0.000000 | 91.985974 | 91.87 | 0% | 0.0013 |
| 0.002495 | 1.948613 | 12.140600 | 84% |
| 0.004990 | 7.737138 | 24.281300 | 68% |
| 0.007485 | 19.371501 | 36.421900 | 47% |
| 0.009980 | 31.578986 | 48.562500 | 35% |
| 0.012475 | 44.818088 | 60.703100 | 26% |
| 0.014971 | 57.369446 | 72.843700 | 21% |
| 0.017466 | 74.792334 | 83.627600 | 11% |
| 0.019961 | 84.248836 | 90.213900 | 7% |
| 0.022456 | 91.985974 | 91.867600 | 0% |
| DÍA 21 | 0.000000 | 0.000000 | 0.000000 | 116.0570 | 115.8408 | 0% | 0.0019 |
| 0.002495 | 4.642283 | 11.900500 | 61% |
| 0.004990 | 14.041473 | 23.800900 | 41% |
| 0.007485 | 26.019709 | 35.701400 | 27% |
| 0.009980 | 39.029563 | 47.601800 | 18% |
| 0.012475 | 46.480140 | 59.502300 | 22% |
| 0.014971 | 57.942567 | 71.402700 | 19% |
| 0.017466 | 72.557161 | 83.117800 | 13% |
| 0.019961 | 73.932652 | 94.210500 | 22% |
| 0.022456 | 77.371380 | 104.353400 | 26% |
| 0.024951 | 97.144066 | 112.504000 | 14% |
| 0.027446 | 116.057070 | 115.840800 | 0% |
| DÍA 28 | 0.000000 | 0.000000 | 0.000000 | 111.853507 | 111.70 | 0% | 0.0014 |
| 0.002495 | 5.903150 | 14.156100 | 58% |
| 0.004990 | 15.588900 | 28.312200 | 45% |
| 0.007485 | 25.331963 | 42.468300 | 40% |
| 0.009980 | 39.545372 | 56.624400 | 30% |
| 0.012475 | 62.527538 | 70.770300 | 12% |
| 0.014971 | 83.389154 | 84.855600 | 2% |
| 0.017466 | 101.442476 | 98.820900 | -3% |
| 0.019961 | 111.853507 | 111.697900 | 0% |

**APÉNDICE K**

**TABLA K1. (1/2)**

ERRORES DE DATOS EXPERIMENTALES Vs DATOS TEÓRICOS GENERADOS POR LA SIMULACIÓN POR COMPUTADORA, 12,5% ZEOLITA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **G1-12,5%** | **DEFORMACIÓN** | **ESFUERZO EXPERIMENTAL**  **[MPa]** | **ESFUERZO TEÓRICO**  **[MPa]** | **ESFUERZO MÁXIMO RUPTURA EXPERIMENTAL** | **ESFUERZO MÁXIMO RUPTURA TEÓRICO** | **ERROR PARA CADA PUNTO** | **ERROR PARA RUPTURA** |
| DÍA 4 | 0.000000 | 0.0000 | 0.0000 | 83.7846 | 83.6684 | 0.00% | 0.0014 |
| 0.002495 | 3.9511 | 11.0746 | 64.32% |
| 0.004990 | 11.5954 | 22.1492 | 47.65% |
| 0.007485 | 22.5030 | 33.2239 | 32.27% |
| 0.009980 | 37.1749 | 43.8593 | 15.24% |
| 0.012475 | 45.5803 | 52.8653 | 13.78% |
| 0.014971 | 46.7925 | 60.4773 | 22.63% |
| 0.017466 | 54.7360 | 66.8157 | 18.08% |
| 0.019961 | 60.1949 | 71.9401 | 16.33% |
| 0.022456 | 50.8760 | 75.9217 | 32.99% |
| 0.024951 | 56.7390 | 78.8750 | 28.06% |
| 0.027446 | 64.1151 | 80.9515 | 20.80% |
| 0.029941 | 69.4107 | 82.3195 | 15.68% |
| 0.032436 | 74.1390 | 83.1403 | 10.83% |
| 0.034931 | 80.1911 | 83.5527 | 4.02% |
| 0.037426 | 83.7846 | 83.6684 | -0.14% |

**TABLA K1. (2/2)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| DÍA 11 | 0.000000 | 0.0000 | 0.0000 | 89.1085 | 89.0032 | 0.00% | 0.0012 |
| 0.002495 | 6.8201 | 17.4802 | 60.98% |
| 0.004990 | 21.2628 | 34.9604 | 39.18% |
| 0.007485 | 39.3734 | 52.4406 | 24.92% |
| 0.009980 | 59.2607 | 68.9735 | 14.08% |
| 0.012475 | 77.9445 | 81.0591 | 3.84% |
| 0.014971 | 88.2607 | 87.5014 | -0.87% |
| 0.017466 | 89.1085 | 89.0032 | -0.12% |
| DÍA 18 | 0.000000 | 0.0000 | 0.0000 | 103.1618 | 102.9635 | 0.00% | 0.0019 |
| 0.002495 | 1.6047 | 18.3686 | 91.26% |
| 0.004990 | 6.4763 | 36.7371 | 82.37% |
| 0.007485 | 19.7154 | 55.1057 | 64.22% |
| 0.009980 | 36.3932 | 72.0216 | 49.47% |
| 0.012475 | 55.3062 | 85.9929 | 35.69% |
| 0.014971 | 79.9504 | 96.1640 | 16.86% |
| 0.017466 | 95.4247 | 101.5987 | 6.08% |
| 0.019961 | 103.1618 | 102.9635 | -0.19% |
| DÍA 25 | 0.000000 | 0.0000 | 0.0000 | 111.7587 | 111.5761 | 0.00% | 0.0016 |
| 0.002495 | 4.2984 | 17.8384 | 75.90% |
| 0.004990 | 16.6778 | 35.6768 | 53.25% |
| 0.007485 | 35.7628 | 53.5152 | 33.17% |
| 0.009980 | 52.7272 | 71.3536 | 26.10% |
| 0.012475 | 75.6520 | 88.1764 | 14.20% |
| 0.014971 | 90.8397 | 101.4576 | 10.47% |
| 0.017466 | 101.7290 | 109.4847 | 7.08% |
| 0.019961 | 111.7587 | 111.5761 | -0.16% |