## *Response of a SDOF system (m=600.0t, T=0.6s, damping ratio z=0.20)*
## *to a triangular loading (peak value=4000kN @ t=1.00s, returns to zero @ t=3.00)*

| Dati | | t | p(t) | sin(wd t) | cos(wd t) | p*cos | p*sin | A(t) | B(t) | x(t) | z=0% | z=2% | z=5% | z=10% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| m | 600000 | 0.0000 | 0.0 | 0.0000 | 1.0000 | 0.00 | 0.00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0 | 0 | 0.000E+00 | 0.000E+00 |
| T | 0.6 | 0.0600 | 24000.0 | 0.5775 | 0.8164 | 19593.92 | 13859.23 | 6.754E-05 | 0.000E+00 | 3.900E-05 | 3.959E-05 | 3.9585E-05 | 3.955E-05 | 3.945E-05 |
| z | 0.2 | 0.1200 | 48000.0 | 0.9429 | 0.3331 | 15986.95 | 45259.45 | 3.643E-04 | -1.271E-04 | 3.012E-04 | 0.0003179 | 0.00031625 | 3.138E-04 | 3.096E-04 |
| wn | 10.47197551 | 0.1800 | 72000.0 | 0.9621 | -0.2726 | -19625.89 | 69273.55 | 7.276E-04 | -5.272E-04 | 8.437E-04 | 0.00091417 | 0.00090546 | 8.931E-04 | 8.745E-04 |
| wd | 10.26039864 | 0.2400 | 96000.0 | 0.6281 | -0.7781 | -74701.46 | 60296.70 | 8.512E-04 | -1.100E-03 | 1.391E-03 | 0.0015426 | 0.0015206 | 1.491E-03 | 1.448E-03 |
| dt | 0.06 | 0.3000 | 120000.0 | 0.0634 | -0.9980 | -119758.35 | 7611.65 | 4.667E-04 | -1.523E-03 | 1.550E-03 | 0.00176338 | 0.00172963 | 1.685E-03 | 1.624E-03 |
| edt | 0.881911378 | 0.3600 | 144000.0 | -0.5245 | -0.8514 | -122601.36 | -75530.83 | -4.712E-04 | -1.413E-03 | 1.450E-03 | 0.00166697 | 0.00163546 | 1.593E-03 | 1.534E-03 |
| e2dt | 0.777767679 | 0.4200 | 168000.0 | -0.9199 | -0.3922 | -65889.53 | -154539.86 | -1.696E-03 | -5.536E-04 | 1.777E-03 | 0.00193862 | 0.00192586 | 1.906E-03 | 1.868E-03 |
| dt/(2 m wd) | 4.87311E-09 | 0.4800 | 192000.0 | -0.9775 | 0.2110 | 40512.84 | -187677.14 | -2.693E-03 | 9.290E-04 | 2.828E-03 | 0.00288475 | 0.00289357 | 2.900E-03 | 2.895E-03 |
| p0 | 400000 | 0.5400 | 216000.0 | -0.6762 | 0.7367 | 159134.37 | -146055.65 | -2.913E-03 | 2.540E-03 | 3.841E-03 | 0.00373606 | 0.00375493 | 3.778E-03 | 3.806E-03 |
| t1 | 1 | 0.6000 | 240000.0 | -0.1266 | 0.9920 | 238068.76 | -30385.30 | -2.033E-03 | 3.580E-03 | 3.808E-03 | 0.00352677 | 0.00354855 | 3.581E-03 | 3.641E-03 |
| t2 | 3 | 0.6600 | 264000.0 | 0.4695 | 0.8830 | 233099.95 | 123937.14 | -1.657E-04 | 3.436E-03 | 2.956E-03 | 0.00258899 | 0.00262342 | 2.673E-03 | 2.756E-03 |
| | | 0.7200 | 288000.0 | 0.8932 | 0.4498 | 129530.37 | 257227.30 | 2.109E-03 | 1.893E-03 | 2.735E-03 | 0.00241806 | 0.00247604 | 2.550E-03 | 2.643E-03 |