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LAMPIRAN

Lampiran 1. Tabel perhitungan kekuatan batas kapal Tanker T3 menggunakan metode NLFEA kondisi *sagging* dan *hogging*.

| <i>Hogging</i> | | <i>Sagging</i> | |
|-----------------------|------------------|-----------------------|------------------|
| <i>Bending Moment</i> | <i>Curvature</i> | <i>Bending Moment</i> | <i>Curvature</i> |
| 0 | 0 | 0 | 0 |
| 3.46E+08 | 1.64E-06 | -2.72E+08 | -1.49E-06 |
| 6.82E+08 | 3.11E-06 | -4.12E+08 | -2.35E-06 |
| 1.04E+09 | 4.50E-06 | -4.69E+08 | -2.88E-06 |
| 1.38E+09 | 5.88E-06 | -4.29E+08 | -3.24E-06 |
| 1.63E+09 | 6.67E-06 | -4.25E+08 | -3.57E-06 |
| 1.86E+09 | 7.51E-06 | -4.23E+08 | -4.05E-06 |
| 2.09E+09 | 8.33E-06 | -4.24E+08 | -4.34E-06 |
| 2.51E+09 | 9.80E-06 | -4.21E+08 | -4.57E-06 |
| 2.85E+09 | 1.11E-06 | -4.20E+08 | -4.91E-06 |
| 3.75E+09 | 1.46E-06 | -4.19E+08 | -5.27E-06 |
| 4.00E+09 | 1.57E-06 | -4.20E+08 | -5.67E-06 |
| 4.16E+09 | 1.66E-06 | -4.18E+08 | -6.24E-06 |
| 4.32E+09 | 1.74E-06 | -4.18E+08 | -6.85E-06 |
| 4.47E+09 | 1.84E-06 | -4.18E+08 | -7.49E-06 |
| 4.65E+09 | 2.02E-06 | -4.18E+08 | -8.15E-06 |
| 4.82E+09 | 2.24E-06 | -4.19E+08 | -8.82E-06 |
| 4.98E+09 | 2.50E-06 | -4.20E+08 | -9.53E-06 |

Lampiran 2. Tabel perhitungan kekuatan batas kapal Tanker T4 menggunakan metode NLFEA kondisi *sagging* dan *hogging*.

| <i>Hogging</i> | | <i>Sagging</i> | |
|-----------------------|------------------|-----------------------|------------------|
| <i>Bending Moment</i> | <i>Curvature</i> | <i>Bending Moment</i> | <i>Curvature</i> |
| 0 | 0 | 0 | 0 |
| 2.08E+08 | 1.01E-06 | -1.90E+08 | -1.01E-06 |
| 4.12E+08 | 1.95E-06 | -3.79E+08 | -2.17E-06 |
| 6.27E+08 | 2.84E-06 | -4.43E+08 | -2.83E-06 |
| 8.35E+08 | 3.74E-06 | -4.28E+08 | -3.58E-06 |
| 9.53E+08 | 4.16E-06 | -4.25E+08 | -3.72E-06 |
| 1.07E+09 | 4.60E-06 | -4.24E+08 | -3.89E-06 |
| 1.18E+09 | 5.05E-06 | -4.23E+08 | -4.10E-06 |
| 1.30E+09 | 5.49E-06 | -4.23E+08 | -4.33E-06 |
| 1.47E+09 | 6.14E-06 | -4.21E+08 | -4.55E-06 |
| 1.73E+09 | 7.10E-06 | -4.21E+08 | -4.79E-06 |
| 2.14E+09 | 8.52E-06 | -4.20E+08 | -5.06E-06 |
| 2.75E+09 | 1.06E-06 | -4.20E+08 | -5.18E-06 |
| 2.90E+09 | 1.12E-06 | -4.19E+08 | -5.31E-06 |
| 3.06E+09 | 1.18E-06 | -4.19E+08 | -5.45E-06 |
| 3.22E+09 | 1.23E-06 | -4.19E+08 | -5.60E-06 |
| 3.53E+09 | 1.36E-06 | -4.19E+08 | -5.75E-06 |
| 3.54E+09 | 1.36E-06 | -4.19E+08 | -5.88E-06 |
| 3.55E+09 | 1.36E-06 | -4.17E+08 | -5.98E-06 |

| <i>Hogging</i> | | <i>Sagging</i> | |
|-----------------------|------------------|-----------------------|------------------|
| <i>Bending Moment</i> | <i>Curvature</i> | <i>Bending Moment</i> | <i>Curvature</i> |
| 3.55E+09 | 1.37E-06 | -4.18E+08 | -6.19E-06 |
| 3.56E+09 | 1.37E-06 | -4.18E+08 | -6.43E-06 |
| 3.57E+09 | 1.38E-06 | -4.19E+08 | -6.69E-06 |
| 3.59E+09 | 1.38E-06 | -4.18E+08 | -6.92E-06 |
| 3.60E+09 | 1.39E-06 | -4.15E+08 | -7.09E-06 |
| 3.62E+09 | 1.39E-06 | -4.18E+08 | -7.44E-06 |
| 3.64E+09 | 1.40E-06 | -4.18E+08 | -7.85E-06 |
| 3.66E+09 | 1.41E-06 | -4.19E+08 | -8.29E-06 |
| 3.69E+09 | 1.42E-06 | -4.19E+08 | -8.68E-06 |
| 3.74E+09 | 1.45E-06 | -4.19E+08 | -9.11E-06 |
| 3.81E+09 | 1.48E-06 | -4.20E+08 | -9.55E-06 |
| 3.91E+09 | 1.53E-06 | -4.20E+08 | -1.00E-06 |