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LAMPIRAN

Lampiran 1. Tabel Perhitungan Kekuatan Batas Kapal Tanker T4

menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

<i>Sagging</i>		<i>Hogging</i>	
<i>Bending Moment</i>	<i>Curvature</i>	<i>Bending Moment</i>	<i>Curvature</i>
0.00E+00	0.00E+00	0	0.00E+00
3.20E+11	3.27E-03	-3.20003E+11	-3.27E-03
6.40E+11	6.54E-03	-6.40003E+11	-6.54E-03
9.60E+11	9.81E-03	-9.59829E+11	-9.81E-03
1.28E+12	1.31E-02	-1.27963E+12	-1.31E-02
1.60E+12	1.63E-02	-1.59935E+12	-1.63E-02
1.92E+12	1.96E-02	-1.91901E+12	-1.96E-02
2.24E+12	2.29E-02	-2.23859E+12	-2.29E-02
2.56E+12	2.62E-02	-2.55809E+12	-2.62E-02
2.88E+12	2.94E-02	-2.87751E+12	-2.94E-02
3.20E+12	3.27E-02	-3.19683E+12	-3.27E-02
3.52E+12	3.60E-02	-3.51606E+12	-3.60E-02
3.84E+12	3.92E-02	-3.83519E+12	-3.92E-02
4.16E+12	4.25E-02	-4.15421E+12	-4.25E-02
4.48E+12	4.58E-02	-4.47311E+12	-4.58E-02
4.80E+12	4.90E-02	-4.79188E+12	-4.90E-02
5.13E+12	5.23E-02	-5.11053E+12	-5.23E-02
5.45E+12	5.56E-02	-5.42904E+12	-5.56E-02
5.77E+12	5.89E-02	-5.74739E+12	-5.89E-02
6.09E+12	6.21E-02	-6.06559E+12	-6.21E-02
6.41E+12	6.54E-02	-6.38362E+12	-6.54E-02
6.73E+12	6.87E-02	-6.70146E+12	-6.87E-02
7.05E+12	7.19E-02	-7.01911E+12	-7.19E-02
7.37E+12	7.52E-02	-7.33656E+12	-7.52E-02
7.69E+12	7.85E-02	-7.65368E+12	-7.85E-02

8.01E+12	8.17E-02	-7.97042E+12	-8.17E-02
8.33E+12	8.50E-02	-8.28691E+12	-8.50E-02
8.65E+12	8.83E-02	-8.6031E+12	-8.83E-02
8.97E+12	9.16E-02	-8.91886E+12	-9.16E-02
9.29E+12	9.48E-02	-9.23342E+12	-9.48E-02
9.61E+12	9.81E-02	-9.54363E+12	-9.81E-02
9.93E+12	1.01E-01	-9.83444E+12	-1.01E-01
1.02E+13	1.05E-01	-1.01178E+13	-1.05E-01
1.06E+13	1.08E-01	-1.03777E+13	-1.08E-01
1.08E+13	1.11E-01	-1.06152E+13	-1.11E-01
1.10E+13	1.14E-01	-1.07919E+13	-1.14E-01
1.14E+13	1.18E-01	-1.09643E+13	-1.18E-01
1.15E+13	1.21E-01	-1.10743E+13	-1.21E-01
1.18E+13	1.24E-01	-1.11934E+13	-1.24E-01
1.20E+13	1.28E-01	-1.12963E+13	-1.28E-01
1.23E+13	1.31E-01	-1.1418E+13	-1.31E-01
1.24E+13	1.34E-01	-1.15001E+13	-1.34E-01
1.26E+13	1.37E-01	-1.15896E+13	-1.37E-01
1.27E+13	1.41E-01	-1.16335E+13	-1.41E-01
1.29E+13	1.44E-01	-1.17009E+13	-1.44E-01
1.30E+13	1.47E-01	-1.17019E+13	-1.47E-01
1.31E+13	1.50E-01	-1.16736E+13	-1.50E-01
1.32E+13	1.54E-01	-1.16412E+13	-1.54E-01
1.34E+13	1.57E-01	-1.16247E+13	-1.57E-01
1.35E+13	1.60E-01	-1.16143E+13	-1.70E-01
1.36E+13	1.63E-01	-1.16147E+13	-1.83E-01
1.37E+13	1.67E-01	-1.16123E+13	-1.86E-01
1.38E+13	1.70E-01	-1.1604E+13	-1.90E-01
1.39E+13	1.73E-01	-1.15982E+13	-1.93E-01
1.39E+13	1.83E-01	-1.15657E+13	-1.96E-01
1.39E+13	2.06E-01	-1.15636E+13	-1.99E-01

1.39E+13	2.19E-01	-1.15672E+13	-2.13E-01
1.39E+13	2.22E-01	-1.15738E+13	-2.19E-01
1.39E+13	2.26E-01	-1.15798E+13	-2.26E-01

Lampiran 2. Tabel Perhitungan Kekuatan Batas Kapal Tanker T4 BKI
menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

<i>Sagging</i>		<i>Hogging</i>	
<i>Bending Moment</i>	<i>Curvature</i>	<i>Bending Moment</i>	<i>Curvature</i>
0.00E+00	0.00E+00	0.00E+00	0.00E+00
-9.9998E+11	-0.009750	1.000E+12	0.010
-2.0000E+12	-0.019501	2.000E+12	0.020
-2.9997E+12	-0.029251	3.000E+12	0.029
-3.9993E+12	-0.039000	3.999E+12	0.039
-4.9986E+12	-0.048748	4.999E+12	0.049
-5.9978E+12	-0.058496	5.998E+12	0.058
-6.9967E+12	-0.068242	6.997E+12	0.068
-7.9953E+12	-0.077986	7.995E+12	0.078
-8.9930E+12	-0.087731	8.993E+12	0.088
-9.9843E+12	-0.097479	9.984E+12	0.097
-1.0549E+13	-0.106875	1.055E+13	0.107
-1.1367E+13	-0.121994	1.137E+13	0.122
-1.1367E+13	-0.133523	1.137E+13	0.134
-1.1367E+13	-0.145033	1.137E+13	0.145
-1.1367E+13	-0.156548	1.137E+13	0.157
-1.1367E+13	-0.168749	1.137E+13	0.169
-1.1367E+13	-0.178369	1.137E+13	0.178
-1.1367E+13	-0.183438	1.137E+13	0.183
-1.1367E+13	-0.186331	1.137E+13	0.186
-1.1367E+13	-0.188283	1.137E+13	0.188
-1.1367E+13	-0.190340	1.137E+13	0.190

-1.1367E+13	-0.191718	1.137E+13	0.192
-1.1367E+13	-0.191731	1.137E+13	0.192
-1.1367E+13	-0.190708	1.137E+13	0.191
-1.1367E+13	-0.191249	1.137E+13	0.191
-1.1367E+13	-0.192311	1.137E+13	0.192
-1.1367E+13	-0.193618	1.137E+13	0.194
-1.1367E+13	-0.194269	1.137E+13	0.194
-1.1367E+13	-0.193985	1.137E+13	0.194
-1.1367E+13	-0.193675	1.137E+13	0.194
-1.1367E+13	-0.193451	1.137E+13	0.193
-1.1367E+13	-0.193398	1.137E+13	0.193
-1.1367E+13	-0.193392	1.137E+13	0.193
-1.1367E+13	-0.193392	1.137E+13	0.193

Lampiran 3. Tabel Perhitungan Kekuatan Batas Kapal Tanker T4 IACS
menggunakan Metode NLFEA Kondisi *Sagging* dan *Hogging*

<i>Sagging</i>		<i>Hogging</i>	
Bending Moment	<i>Curvature</i>	Bending Moment	<i>Curvature</i>
0.00E+00	0.00E+00	0.00E+00	0.00E+00
-1.0E+12	-0.009709	1.00000E+12	0.010
-2.0E+12	-0.019418	2.00000E+12	0.019
-3.0E+12	-0.029127	2.99984E+12	0.029
-4.0E+12	-0.038835	3.99965E+12	0.039
-5.0E+12	-0.048543	4.99934E+12	0.049
-6.0E+12	-0.058249	5.99893E+12	0.058
-7.0E+12	-0.067955	6.99836E+12	0.068
-8.0E+12	-0.077659	7.99757E+12	0.078
-9.0E+12	-0.087344	8.99475E+12	0.087
-1.0E+13	-0.09694	9.98276E+12	0.097
-1.1E+13	-0.105601	1.08741E+13	0.106

-1.1E+13	-0.119233	1.08741E+13	0.119
-1.1E+13	-0.128878	1.08741E+13	0.129
-1.1E+13	-0.137163	1.08741E+13	0.137
-1.1E+13	-0.144281	1.08741E+13	0.144
-1.1E+13	-0.153339	1.08741E+13	0.153
-1.1E+13	-0.155503	1.08741E+13	0.156
-1.1E+13	-0.156033	1.08741E+13	0.156
-1.1E+13	-0.158555	1.08741E+13	0.159
-1.1E+13	-0.158305	1.08741E+13	0.158
-1.1E+13	-0.157853	1.08741E+13	0.158
-1.1E+13	-0.157834	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158
-1.1E+13	-0.157831	1.08741E+13	0.158

