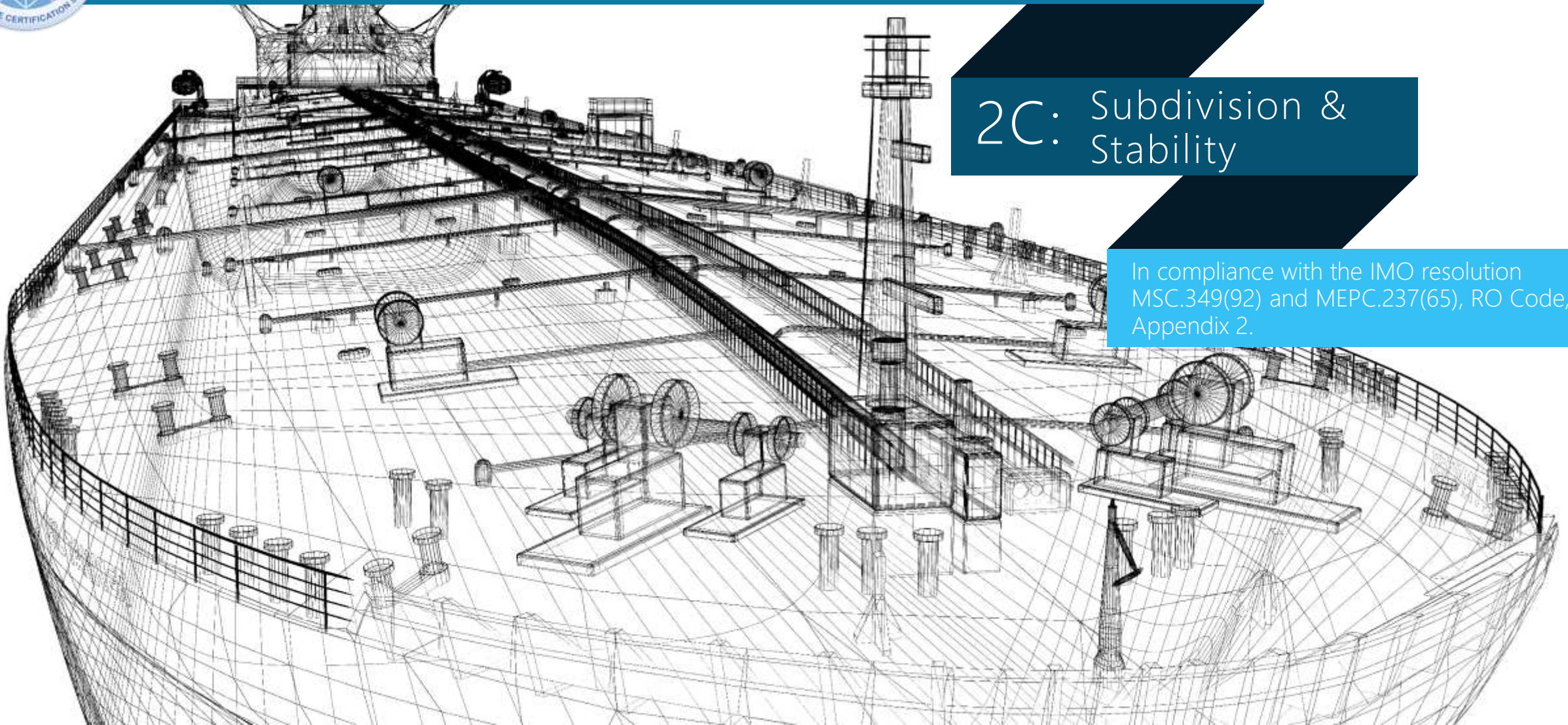


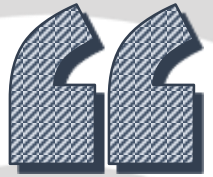


Intermaritime Certification Services (ICS Class)

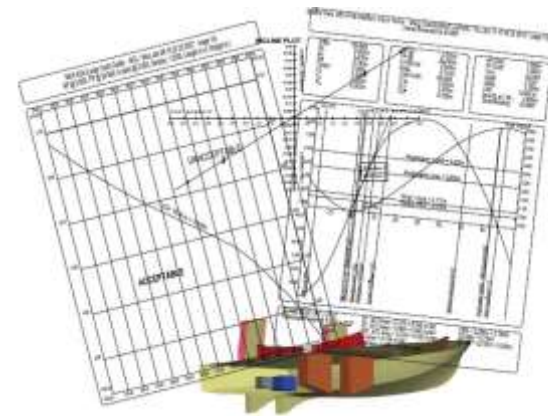
2C: Subdivision & Stability

In compliance with the IMO resolution MSC.349(92) and MEPC.237(65), RO Code, Appendix 2.





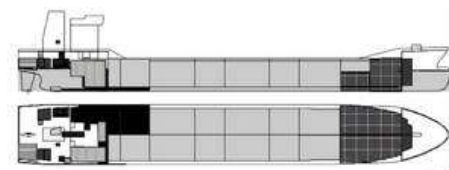
It is an International Maritime Organization (IMO) requirement, through the International Conference of Load Lines, 1966, Annex 1, that *the Master of a ship should be supplied with a loading and stability information booklet.*



“

This booklet identifies typical service conditions for loading, unloading and ballasting operations to ensure that the ship maintains its normal operating condition and does not incur any damage. This is known as '**Intact Stability**'.

”



Displacement Status

Item	Status	Stpr	Depth [ft]	LCB [ft]	TCE [ft]	LCR [ft]	SW [ft]
BLK	Blocked	1.00	15.44(3.3)	15.00	14.375	14.375	1.000
BALLOON P	Blocked	1.00	15.00	15.00	15.000	15.000	1.000
WATER TANK	Blocked	1.00	14.18	14.18	14.180	14.180	1.000
WATER TANK	Blocked	1.00	13.75	13.75	13.750	13.750	1.000
WATER TANK	Blocked	1.00	13.32	13.32	13.320	13.320	1.000
WATER TANK	Blocked	1.00	12.89	12.89	12.890	12.890	1.000
WATER TANK	Blocked	1.00	12.46	12.46	12.460	12.460	1.000
WATER TANK	Blocked	1.00	12.03	12.03	12.030	12.030	1.000
WATER TANK	Blocked	1.00	11.60	11.60	11.600	11.600	1.000
WATER TANK	Blocked	1.00	11.17	11.17	11.170	11.170	1.000
WATER TANK	Blocked	1.00	10.74	10.74	10.740	10.740	1.000
WATER TANK	Blocked	1.00	10.31	10.31	10.310	10.310	1.000
WATER TANK	Blocked	1.00	9.88	9.88	9.880	9.880	1.000
WATER TANK	Blocked	1.00	9.45	9.45	9.450	9.450	1.000
WATER TANK	Blocked	1.00	9.02	9.02	9.020	9.020	1.000
WATER TANK	Blocked	1.00	8.59	8.59	8.590	8.590	1.000
WATER TANK	Blocked	1.00	8.16	8.16	8.160	8.160	1.000
WATER TANK	Blocked	1.00	7.73	7.73	7.730	7.730	1.000
WATER TANK	Blocked	1.00	7.30	7.30	7.300	7.300	1.000
WATER TANK	Blocked	1.00	6.87	6.87	6.870	6.870	1.000
WATER TANK	Blocked	1.00	6.44	6.44	6.440	6.440	1.000
WATER TANK	Blocked	1.00	6.01	6.01	6.010	6.010	1.000
WATER TANK	Blocked	1.00	5.58	5.58	5.580	5.580	1.000
WATER TANK	Blocked	1.00	5.15	5.15	5.150	5.150	1.000
WATER TANK	Blocked	1.00	4.72	4.72	4.720	4.720	1.000
WATER TANK	Blocked	1.00	4.29	4.29	4.290	4.290	1.000
WATER TANK	Blocked	1.00	3.86	3.86	3.860	3.860	1.000
WATER TANK	Blocked	1.00	3.43	3.43	3.430	3.430	1.000
WATER TANK	Blocked	1.00	3.00	3.00	3.000	3.000	1.000
WATER TANK	Blocked	1.00	2.57	2.57	2.570	2.570	1.000
WATER TANK	Blocked	1.00	2.14	2.14	2.140	2.140	1.000
WATER TANK	Blocked	1.00	1.71	1.71	1.710	1.710	1.000
WATER TANK	Blocked	1.00	1.28	1.28	1.280	1.280	1.000
WATER TANK	Blocked	1.00	0.85	0.85	0.850	0.850	1.000
WATER TANK	Blocked	1.00	0.42	0.42	0.420	0.420	1.000
WATER TANK	Blocked	1.00	0.00	0.00	0.000	0.000	1.000
WATER TANK	Blocked	1.00	-0.42	-0.42	-0.420	-0.420	1.000
WATER TANK	Blocked	1.00	-0.85	-0.85	-0.850	-0.850	1.000
WATER TANK	Blocked	1.00	-1.28	-1.28	-1.280	-1.280	1.000
WATER TANK	Blocked	1.00	-1.71	-1.71	-1.710	-1.710	1.000
WATER TANK	Blocked	1.00	-2.14	-2.14	-2.140	-2.140	1.000
WATER TANK	Blocked	1.00	-2.57	-2.57	-2.570	-2.570	1.000
WATER TANK	Blocked	1.00	-3.00	-3.00	-3.000	-3.000	1.000
WATER TANK	Blocked	1.00	-3.43	-3.43	-3.430	-3.430	1.000
WATER TANK	Blocked	1.00	-3.86	-3.86	-3.860	-3.860	1.000
WATER TANK	Blocked	1.00	-4.29	-4.29	-4.290	-4.290	1.000
WATER TANK	Blocked	1.00	-4.72	-4.72	-4.720	-4.720	1.000
WATER TANK	Blocked	1.00	-5.15	-5.15	-5.150	-5.150	1.000
WATER TANK	Blocked	1.00	-5.58	-5.58	-5.580	-5.580	1.000
WATER TANK	Blocked	1.00	-6.01	-6.01	-6.010	-6.010	1.000
WATER TANK	Blocked	1.00	-6.44	-6.44	-6.440	-6.440	1.000
WATER TANK	Blocked	1.00	-6.87	-6.87	-6.870	-6.870	1.000
WATER TANK	Blocked	1.00	-7.30	-7.30	-7.300	-7.300	1.000
WATER TANK	Blocked	1.00	-7.73	-7.73	-7.730	-7.730	1.000
WATER TANK	Blocked	1.00	-8.16	-8.16	-8.160	-8.160	1.000
WATER TANK	Blocked	1.00	-8.59	-8.59	-8.590	-8.590	1.000
WATER TANK	Blocked	1.00	-9.02	-9.02	-9.020	-9.020	1.000
WATER TANK	Blocked	1.00	-9.45	-9.45	-9.450	-9.450	1.000
WATER TANK	Blocked	1.00	-9.88	-9.88	-9.880	-9.880	1.000
WATER TANK	Blocked	1.00	-10.31	-10.31	-10.310	-10.310	1.000
WATER TANK	Blocked	1.00	-10.74	-10.74	-10.740	-10.740	1.000
WATER TANK	Blocked	1.00	-11.17	-11.17	-11.170	-11.170	1.000
WATER TANK	Blocked	1.00	-11.60	-11.60	-11.600	-11.600	1.000
WATER TANK	Blocked	1.00	-12.03	-12.03	-12.030	-12.030	1.000
WATER TANK	Blocked	1.00	-12.46	-12.46	-12.460	-12.460	1.000
WATER TANK	Blocked	1.00	-12.89	-12.89	-12.890	-12.890	1.000
WATER TANK	Blocked	1.00	-13.32	-13.32	-13.320	-13.320	1.000
WATER TANK	Blocked	1.00	-13.75	-13.75	-13.750	-13.750	1.000
WATER TANK	Blocked	1.00	-14.18	-14.18	-14.180	-14.180	1.000
WATER TANK	Blocked	1.00	-14.61	-14.61	-14.610	-14.610	1.000
WATER TANK	Blocked	1.00	-15.04	-15.04	-15.040	-15.040	1.000
WATER TANK	Blocked	1.00	-15.47	-15.47	-15.470	-15.470	1.000
WATER TANK	Blocked	1.00	-15.90	-15.90	-15.900	-15.900	1.000
WATER TANK	Blocked	1.00	-16.33	-16.33	-16.330	-16.330	1.000
WATER TANK	Blocked	1.00	-16.76	-16.76	-16.760	-16.760	1.000
WATER TANK	Blocked	1.00	-17.19	-17.19	-17.190	-17.190	1.000
WATER TANK	Blocked	1.00	-17.62	-17.62	-17.620	-17.620	1.000
WATER TANK	Blocked	1.00	-18.05	-18.05	-18.050	-18.050	1.000
WATER TANK	Blocked	1.00	-18.48	-18.48	-18.480	-18.480	1.000
WATER TANK	Blocked	1.00	-18.91	-18.91	-18.910	-18.910	1.000
WATER TANK	Blocked	1.00	-19.34	-19.34	-19.340	-19.340	1.000
WATER TANK	Blocked	1.00	-19.77	-19.77	-19.770	-19.770	1.000
WATER TANK	Blocked	1.00	-20.20	-20.20	-20.200	-20.200	1.000
WATER TANK	Blocked	1.00	-20.63	-20.63	-20.630	-20.630	1.000
WATER TANK	Blocked	1.00	-21.06	-21.06	-21.060	-21.060	1.000
WATER TANK	Blocked	1.00	-21.49	-21.49	-21.490	-21.490	1.000
WATER TANK	Blocked	1.00	-21.92	-21.92	-21.920	-21.920	1.000
WATER TANK	Blocked	1.00	-22.35	-22.35	-22.350	-22.350	1.000
WATER TANK	Blocked	1.00	-22.78	-22.78	-22.780	-22.780	1.000
WATER TANK	Blocked	1.00	-23.21	-23.21	-23.210	-23.210	1.000
WATER TANK	Blocked	1.00	-23.64	-23.64	-23.640	-23.640	1.000
WATER TANK	Blocked	1.00	-24.07	-24.07	-24.070	-24.070	1.000
WATER TANK	Blocked	1.00	-24.50	-24.50	-24.500	-24.500	1.000
WATER TANK	Blocked	1.00	-24.93	-24.93	-24.930	-24.930	1.000
WATER TANK	Blocked	1.00	-25.36	-25.36	-25.360	-25.360	1.000
WATER TANK	Blocked	1.00	-25.79	-25.79	-25.790	-25.790	1.000
WATER TANK	Blocked	1.00	-26.22	-26.22	-26.220	-26.220	1.000
WATER TANK	Blocked	1.00	-26.65	-26.65	-26.650	-26.650	1.000
WATER TANK	Blocked	1.00	-27.08	-27.08	-27.080	-27.080	1.000
WATER TANK	Blocked	1.00	-27.51	-27.51	-27.510	-27.510	1.000
WATER TANK	Blocked	1.00	-27.94	-27.94	-27.940	-27.940	1.000
WATER TANK	Blocked	1.00	-28.37	-28.37	-28.370	-28.370	1.000
WATER TANK	Blocked	1.00	-28.80	-28.80	-28.800	-28.800	1.000
WATER TANK	Blocked	1.00	-29.23	-29.23	-29.230	-29.230	1.000
WATER TANK	Blocked	1.00	-29.66	-29.66	-29.660	-29.660	1.000
WATER TANK	Blocked	1.00	-30.09	-30.09	-30.090	-30.090	1.000
WATER TANK	Blocked	1.00	-30.52	-30.52	-30.520	-30.520	1.000
WATER TANK	Blocked	1.00	-30.95	-30.95	-30.950	-30.950	1.000
WATER TANK	Blocked	1.00	-31.38	-31.38	-31.380	-31.380	1.000
WATER TANK	Blocked	1.00	-31.81	-31.81	-31.810	-31.810	1.000
WATER TANK	Blocked	1.00	-32.24	-32.24	-32.240	-32.240	1.000
WATER TANK	Blocked	1.00	-32.67	-32.67	-32.670	-32.670	1.000
WATER TANK	Blocked	1.00	-33.10	-33.10	-33.100	-33.100	1.000
WATER TANK	Blocked	1.00	-33.53	-33.53	-33.530	-33.530	1.000
WATER TANK	Blocked	1.00	-33.96	-33.96	-33.960	-33.960	1.000
WATER TANK	Blocked	1.00	-34.39	-34.39	-34.390	-34.390	1.000
WATER TANK	Blocked	1.00	-34.82	-34.82	-34.820	-34.820	1.000
WATER TANK	Blocked	1.00	-35.25	-35.25	-35.250	-35.250	1.000
WATER TANK	Blocked	1.00	-35.68	-35.68	-35.680	-35.680	1.000
WATER TANK	Blocked	1.00	-36.11	-36.11	-36.110	-36.110	1.000
WATER TANK	Blocked	1.00	-36.54	-36.54	-36.540	-36.540	1.000
WATER TANK	Blocked	1.00	-36.97	-36.97	-36.970	-36.970	1.000
WATER TANK	Blocked	1.00	-37.40	-37.40	-37.400	-37.400	1.000
WATER TANK	Blocked	1.00	-37.83	-37.83	-37.830	-37.830	1.000
WATER TANK	Blocked	1.00	-38.26	-38.26	-38.260	-38.260	1.000
WATER TANK	Blocked	1.00	-38.69	-38.69	-38.690	-38.690	1.000
WATER TANK	Blocked	1.00	-39.12	-39.12	-39.120	-39.120	1.000
WATER TANK	Blocked	1.00	-39.55	-39.55	-39.550	-39.550	1.000
WATER TANK	Blocked	1.00	-39.98	-39.98	-39.980	-39.980	1.000
WATER TANK	Blocked	1.00	-40.41	-40.41	-40.410	-40.410	1.000
WATER TANK	Blocked	1.00	-40.84	-40.84	-40.840	-40.840	1.000
WATER TANK	Blocked	1.00	-41.27	-41.27	-41.270	-41.270	1.000
WATER TANK	Blocked	1.00	-41.70	-41.70	-41.700	-41.700	1.000
WATER TANK	Blocked	1.00	-42.13	-42.13	-42.130	-42.130	1.000
WATER TANK	Blocked	1.00	-42.56	-42.56	-42.560	-42.560	1.000
WATER TANK	Blocked	1.00	-42.99	-42.99	-42.990	-42.990	1.000
WATER TANK	Blocked	1.00	-43.42	-43.42	-43.420	-43.420	1.000
WATER TANK	Blocked	1.00	-43.85	-43.85	-43.850	-43.850	1.000
WATER TANK	Blocked	1.00	-44.28	-44.28	-44.280	-44.280	1.000
WATER TANK	Blocked	1.00	-44.71	-44.71	-44.710	-44.710	1.000
WATER TANK	Blocked	1.00	-45.14	-45.14	-45.140	-45.140	1.000
WATER TANK	Blocked	1.00	-45.57	-45.57	-45.570	-45.570	1.000
WATER TANK	Blocked	1.00	-46.00	-46.00	-46.000	-46.000	1.000
WATER TANK	Blocked	1.00	-46.43	-46.43	-46.430	-46.430	1.000
WATER TANK	Blocked	1.00	-46.86	-46.86	-46.860	-46.860	1.000
WATER TANK	Blocked	1.00	-47.29	-47.29	-47.290	-47.290	1.000
WATER TANK	Blocked	1.00	-47.72	-47.72	-47.720	-47.720	1.000
WATER TANK	Blocked	1.00	-48.15	-48.15	-48.150	-48.150	1.000
WATER TANK	Blocked	1.00	-48.58	-48.58	-48.580	-48.580	1.000
WATER TANK	Blocked	1.00	-49.01	-49.01	-49.010	-49.010	1.000
WATER TANK	Blocked	1.00	-49.44	-49.44	-49.440	-49.440	1.000

With this in mind, we need to determine *what conditions of loading and ballast are safe for the operation of the ship.*





Ships are designed to float upright.

The upthrust on a ship's hull (*buoyancy force*) is equal to the weight of the volume of displaced water. This in turn is equal to the weight of the ship. This is Archimedes' principle.

