

INSTRUCTIONS FOR COMPLETION OF FORMS TO DETERMINE HOGGING AND SAGGING NUMERALS

1. Sheet 81E is the form for computing longitudinal bending stress numerals. The resulting numeral should not exceed 100.
2. The weights entered on Sheets 81B, 81C, and 81D, divided by 100 and as applicable, are entered in the "Tons/100" column of Sheet 81E for departure and arrival conditions. Multiply the "Tons/100" by the Hogging and Sagging Factors for all weights entered in lines 1-27 and enter totals on line 28, "Total Deadweight."
3. Line 29 gives the light ship value for "Tons/100" and the associated hogging and sagging numerals. The light ship value includes weights for spare tailshaft and stowage as given on Sheet 81B ($[1282 + 29]/100 = 128.50$). Add lines 28 and 29 to obtain line 30 displacement and hogging and sagging numerals for departure and arrival conditions.
4. Enter the "Tons/100" deadweight from line 28 in line 31 "Numeral" columns for both hogging and sagging, and subtract from line 30. The resulting values in line 32 must not exceed 100.

CONDITION:

LONGITUDINAL BENDING STRESSES (PSI)

DESCRIPTION	DEPARTURE					ARRIVAL				
	TONS/100	HOGGING		SAGGING		TONS/100	HOGGING		SAGGING	
		FACTOR	NUMERAL	FACTOR	NUMERAL		FACTOR	NUMERAL	FACTOR	NUMERAL
1. FORE PEAK		1.64		0.30			1.64		0.30	
2. DEEP TANK P/S		1.53		0.42			1.53		0.42	
3. FWD STORES		1.51		0.44			1.51		0.44	
4. FWD BUNKERS		1.43		0.54			1.43		0.54	
5. FWD COFFERDAM		1.36		0.61			1.36		0.61	
6. #1 CARGO TANK		1.28		0.70			1.28		0.70	
7. #2 CARGO TANK		1.14		0.86			1.14		0.86	
8. #3 CARGO TANK		1.00		1.02			1.00		1.02	
9. #4 CARGO TANK		0.85		1.18			0.85		1.18	
10. BRIDGE CREW		0.78		1.25			0.78		1.25	
11. BRIDGE STORES		0.78		1.25			0.78		1.25	
12. BRIDGE F.W.		0.78		1.25			0.78		1.25	
13. #5 CARGO TANK		0.70		1.35			0.70		1.35	
14. #6 BALLAST TANK		0.56		1.51			0.56		1.51	
15. #7 CARGO/BALLST TANK		0.51		1.57			0.51		1.57	
16. #8 CARGO/BALLST TANK		0.67		1.43			0.67		1.43	
17. #9 CARGO/BALLST TANK		0.83		1.28			0.83		1.28	
18. #10 CARGO TANK		1.00		1.14			1.00		1.14	
19. #11 CARGO TANK		1.16		0.99			1.16		0.99	
20. AFT COFFERDAM		1.26		0.90			1.26		0.90	
21. AFT BUNKERS		1.28		0.88			1.28		0.88	
22. AFT SETTLERS		1.29		0.87			1.29		0.87	
23. DISTILLED WATER		1.51		0.67			1.51		0.67	
24. AFT STORES		1.56		0.61			1.56		0.61	
25. AFT CREW		1.50		0.68			1.50		0.68	
26. F.W. AFT		1.77		0.44			1.77		0.44	
27. AFT PEAK		1.82		0.40			1.82		0.40	
28. TOTAL DEADWEIGHT										
29. LIGHT SHIP	128.50		83.63		14.01	128.50		83.63		14.01
30. DISPLACEMENT										
31. DEADWEIGHT CORRECTION - LINE 28 WEIGHT										
32. NUMERAL (MAY NOT EXCEED 100)										