

MODULUS OF SECTION

TANKER DRAUGHT = 27.85

NAME: W. R. LINDGREN & NIKE

Particulars of Vessel 458.42 x 59.00 x 35.50

Height of Assumed Axis above Keel 15.00

BELOW ASSUMED AXIS.								ABOVE ASSUMED AXIS.							
ITEM.	SCANTLING.	AREA.	h.	Ah.	Ah ² .	d.	Ad ² .	ITEM.	SCANTLING.	AREA.	h.	Ah.	Ah ² .	d.	Ad ² .
FLAT KEEL ...								TOP DECK STRINGER ...							
" " ...								" " " ...							
CENTRE GIRDER PLATE ...								" " ANGLE ...							
" " BOTTOM ANGLES								" " PLATING...							
" " TOP ANGLES								2ND DECK STRINGER ...							
CENTRE STRAKE TANK TOP...								" " ANGLE ...							
MARGIN PLATE ...								" " PLATING							
" " ANGLES ...								3RD DECK STRINGER ...							
BOTTOM PLATING ...								" " ANGLE ...							
BILGE PLATING ...								" " PLATING							
SIDE PLATING ...								4TH DECK STRINGER ...							
TANK TOP PLATING...								" " ANGLE ...							
No. 1 SIDE STRINGER PLATE								" " PLATING							
" " " ANGLES								SHEERSTRAKE ...							
No. 2 " " PLATE								" " ...							
" " " ANGLES								STRAKE BELOW SHEERSTRAKE							
No. 3 " " PLATE								SHELL PLATING ...							
" " " ANGLES								SIDE STRINGER PLATE							
SIDE KEELSON PLATE ...								" " ANGLES ...		301.72		6784.9	116050		22897
" " TOP ANGLES									49.2 x 1.38	67.90	20.85	1415.9	29522		
" " BOTTOM "									55.1 x 1.38	76.04	21.6	1643.0	35480		
								TOTALS ABOVE ASSUMED AXIS.		645.66		9843.8	181052		22897
								" BELOW ASSUMED AXIS.		812.40		7365.5	87315		18525
								SUM OR DIFFERENCE		1458.06	1.70	2478.3	268367		41422
								Ad ² /12					3452		3452
TOTALS BELOW ASSUMED AXIS.		8240		7365.5	87315		18525								

271819

STANDARD $I_y = 17.00 \times 27.85 \times 59.00 = 27935$

SUMMARY.	
MOMENT OF INERTIA ABOUT ASSUMED AXIS ...	271819
NEUTRAL AXIS ABOVE ASSUMED AXIS (x) ...	1.70
TOTAL AREA $\times x^2$...	4214
CORRECTED INERTIA (ONE SIDE ONLY) $= (1)-(3)$...	267605
CORRECTED INERTIA (BOTH SIDES) ...	535210
VALUE OF "Y" AT HEEL OF GUNWALE BAR ...	18.80
MODULUS OF SECTION AT GUNWALE ...	28470
VALUE OF "Y" AT KEEL ...	
MODULUS OF SECTION AT KEEL ...	

Initials _____

Date _____

20.50
1.70
18.80

N.B.—The assumed axis is to be taken below lowest deck. The Top Deck is the uppermost strength deck, and other decks are to be numbered from that deck.