

STEEL STEAMER ~~OF MOTORSHIP~~

Received at London Office APR - 4 1938

State if Report has been sent on the Freeboard of the Vessel YES.

State if Report is sent on the Machinery of the Vessel YES.

Date of completion of report 30TH MARCH, 1938

Port of WEST HARTLEPOOL.

No. 17815.

Survey held at WEST HARTLEPOOL

Date First Survey 2ND MARCH, 1937 Last Survey 24TH MARCH, 1938.

On the (State if Machinery fitted Aft and

SINGLE SCREW STEAMER "INDORA", MACHINERY AMIDSHIPS.

State Type (Full Scantling, Complete Superstructure

"LIMITED DRAUGHT"

State Type of Erections POOP, BRIDGE, & PILE.

TONNAGE under
Tonnage Deck...

6128.39

CLASS X 100 A1.

State if with freeboard
as condition of Class

YES

Built at WEST HARTLEPOOL.

Do. of space or spaces
between Tonnage Dk.
and Upper Dk.

Total

Gross Tonnage

6622.06

Register Tonnage

3963.31

Length from fore part of stem to after part of stern
post on summer L.W.L. See Sec. 3 (1a)

L 420.00

Launched 18TH JANUARY, 1938 Yard No. 1080.

Breadth (greatest moulded)

B 57.29

Builders Messrs. N. Gray & Co., Ltd.

Depth, at middle of length from top of keel to top
of beam at side of uppermost continuous
deck. See Sec. 3 (1c)

D 34.50

Owners British India Steam Navigation Co., Ltd.

1st Longitudinal Number (L x D)

= 14490

Managers

(Where necessary to be entered in Reg. Book)

2nd Numeral L x (B + D)

= 38551

Residence 122, LEADENHALL ST.,
LONDON, E.C.3.REGISTERED DIMENSIONS.
FEET.

Length

420.8

Breadth

57.6

Depth

34.0

Framing Depth "d" at middle of length. See
Sec. 3 (1d)

22.79

Proportions—Depth to Length—Uppermost con-
tinuous deck to top of keel

12.17

Port of Registry LONDON.

Do. Long Bridge to top
of keel

10.00

If surveyed while building, afloat, or in dry dock

Draught Moulded

24.81

Whilst building, afloat, and in dry dock.

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	30 1/2	✓	Bracket Floors, Frame		
" " from 1/2 length amidships to Collision bulkhead	27	✓	" " Reversed Frame		
" " in peaks	24	✓	" " Vertical Struts		
DE FRAMING.			Centre Girder, depth and thickness amidships	43 1/2 x .53	✓
Frame Amidships, Angle, E or C	12 3/4 x .46	✓	" " top Angles	3 1/2 x 3 1/2 x .47	✓
" " Extends up to	15' below 2nd Dk.	✓	" " bottom Angles	4 x 4 x .53	✓
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	ONE C .37	✓
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	39 1/2 x .53	✓
Depth of Framing Girder	12	✓	" " Vertical Angle to Tank side	6' x 6' x .43 WITH 1/2" BACK BAR	✓
Frames in Uppermost Continuous 'tween Decks, Angle, E or C	7 1/2 x 3 1/2 x .38	APPROV. .36	" " Bracket abaft 1/2 len. from stem	3 1/2 x 3 1/2 x .43	✓
" " Second 'tween Decks, Angle, E or C	✓		" " Vertical Angle to Tank side	6' x 6' x .43 WITH 1/2" BACK BAR	✓
" " Third " " " "	✓		" " Bracket from forward 1/2 len. from stem to Panting Area	3 1/2 x 3 1/2 x .43	✓
" " from 1/2 len. for'd. to 15% len. from Stem	12 3/4 x .75	APPROV. CHANNELS	" " Gussets, spacing and scantling abaft 1/2 len. from stem	CONTINUOUS .41 5-7/8 RINS.	✓
" " in Peaks, Angle or C	7 1/2 x 3 1/2 x .44	✓	" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area	CONTINUOUS .41 5-7/8 RINS.	✓
Diameter and Spacing of Rivets through Frame and Shell Plating amid- ships	7/8" 5 1/2" SIDES. 7/8" 6 1/2" BOTTOM	✓	Tank Side Brackets, height above base line at toe of Frame and thickness	71 x .45 INCREASED IN HEIGHT FORNS.	✓
State if Frame Joggled	YES.	✓	INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	YES.	✓	Breadth and thickness of Middle Line Strake	66 x .51	✓
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	YES.	✓	Thickness of remainder in Holds	.43	✓
DOUBLE BOTTOM.			Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	YES.	✓
Floors, Depth and thickness at mid-line in Holds			BEAMS.		
Height of Brackets at side above base line at toe of frame			Uppermost Continuous Deck, amidships in Wells, Angle, E or C	9 3/4 x .42	✓
Middle Line Keelson, on Floors, Angles, E or C			" " in way of Bridge, Angle, E or C	9 3/4 x .54	✓
" " Through Plate or Intercoastal Plate			Spacing	30 1/2	✓
" " Foundation Plate on Floors			Second Deck, amidships, Angle, E or C	10 3/4 x .40	✓
" " Flat Plate Keel Angles			Spacing	30 1/2	✓
Side Keelsons, No. each side			Third Deck, amidships, Angle, E or C		
" " thickness of Intercoastal Plate			Spacing		
" " Angles			Fourth Deck, amidships, Angle, E or C		
Spacing			Spacing		
DOUBLE BOTTOM.			Poop Deck, Angle, E or C	7 3 x .36	✓
Solid Floors, thickness and spacing	41 @ 30 1/2	✓	Spacing	24 x 30 1/2	✓
" " Are Frame and Reversed Frame joggled?	YES.	✓	Bridge Deck, Angle, E or C	8 3/4 x .44	APPROV. 8' x 3'
Bracket Floors, breadth and thickness at middle line	NONE.	✓	Spacing	30 1/2	✓
" " breadth and thickness at margin plate			Forecastle Deck, Angle, E or C	9 3/4 x .40	✓
			Spacing	27	✓

PILLARS AND DECKS.

	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows.....	TWO		✓	Stringer Plate, breadth and thickness in way of Bridge	77 1/2 x .38	✓	
" in 'tween Decks, Size and Spacing.....	WIDELY SPACED			Thickness of Plating abreast Deck openings in way of Wells .....	.36	✓	
" " " " " "	PILLARS AND GIRDERS AS PER APPROVED PLANS.			Thickness of Plating abreast Deck openings in way of Bridge .....	.34	✓	
" in Holds " "			✓	Thickness of Plating within line of openings...	.34	✓	
" " " " " "				If Sheathed, material and thickness	NONE	✓	
Centre Line Bulkhead.				Third Deck.			
Stiffeners and Spacing.....	NONE		✓	Stringer Plate, breadth and thickness.....	✓		
Plating, thickness of	✓			If Plated, state thickness.....	✓		
STRINGERS AND DECKS.				Fourth Deck.			
Uppermost Continuous Deck.				Stringer Plate, breadth and thickness.....	✓		
Stringer Plate, breadth and thickness in Wells	77 1/2 x .64	✓		If Plated, state thickness	✓		
" " " " in way of Bridge	77 1/2 x .46	✓		Poop Deck.			
" Angle in Wells	6 6 .64	✓		Stringer Plate, breadth and thickness	36 1/2 x .36	✓	
Thickness of Plating abreast Deck openings in way of Wells .....	.57	✓		.30" PLATING.		✓	
Thickness of Plating abreast Deck openings in way of Bridge .....	.36	✓		Plating, Sheathing, material and thickness ...	TEAK, 5/2"	✓	
Thickness of Plating within line of openings...	.42 IN WELLS. .34 IN BRIDGE.	✓		Bridge Deck.			
If Sheathed, material and thickness	NONE	✓		Stringer Plate, breadth and thickness.....	70 x .45	✓	
Second Deck.				Plating, Sheathing, material and thickness ...	.44 ABREAST OF G2. .38 WITHIN	✓	
Stringer Plate, breadth and thickness in Wells...	77 1/2 x .38	✓		Forecastle Deck.			
				Stringer Plate, breadth and thickness.....	35 x .36	✓	
				Plating, Sheathing, material and thickness ...	.34	✓	

SHELL PLATING.

SCANTLINGS.					RIVETING.				
STRAKES.	AS IN VESSEL.				EDGES. State if jogged?	NO. ✓	No. of Rows of Rivets.	BUTTS.	
	AMIDSHIPS.		FORWARD.	AFT.				RIVETS.	
	Breadth. Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.				Diam. Inches.	Spacing or to cr. Inches.
FLAT PLATE KEEL	5 1/2	.81	.71	.71	DOUBLE	1 3/4	FOUR	1	4
" DBLG. (if any)	7 1/2	.62	.68	.62	DOUBLE	7/8 3/8	FOUR	7/8	3 1/2
BOTTOM PLATING, No. of Strakes FOUR	7 1/2	.62	.68	.59					
BILGE PLATING, No. of Strakes TWO	71	.62	.68	.71					
SIDE PLATING, No. of Strakes THREE	71	.62	.68	.46			THREE		3/8
UPPER DECK, Sheer-strake in Wells.....	69	.74					FOUR	1	4
UPPER DECK, Sheer-strake in Bridge ...	80 1/2	.62						7/8	3 1/2
STRAKE BELOW Sheer-strake in Wells.....	80 1/2	.65	.46	.46					
STRAKE BELOW Sheer-strake in Bridge ...	80 1/2	.62					THREE		3/8
POOP SIDE PLATING .....			.39		SINGLE	3/4 3	ONE	3/4	2 5/8
BRIDGE SIDE PLATING ...	80	.55			DOUBLE	7/8 3/8	THREE	7/8	3 1/2
FORECASTLE SIDE PLATING			.42		SINGLE	3/4 3	ONE	3/4	2 5/8

WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c) **SEVEN** ✓

 " Deck next below ✓

As per Rule **SEVEN** ✓

STIFFENERS.

	Plating Thickness.	VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks	FR. 93 .26	4 1/2 x 3" x 34' 0"	27'-30"		
" " Second "	✓				
" " Third "	✓				
" " Holds ... FR. 93 ..	24-48	12 x 3 1/2 x 3 1/2 x 40' 0"	48' 0"		
COLLISION (in Hold) ... FR. 11 x 15	26-51	5 x 3 x 30' 0"	24'	SECOND D" AND 4 S.B. BEAMS.	
AFTER PEAK .. FR. 11 x 15	30-51	7 x 3 x 47' 0"	24'	S.B. BEAM AND RECESS FLAT.	

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	FLAT PLATE KEEL.			✓
STEM	W.I. FORGING 10 x 2 1/4	C.M.E.W.		APPROVED ROLLER STEEL.
STERN FRAME { Propeller Post	10 1/2 x 8 1/2	W. Gray		10 1/2 x 8 1/2
{ Rudder	10 1/2 x 8 1/2	W. Gray		10 1/2 x 8 1/2
Speed of Vessel	12 KNOTS.			✓
RUDDER—Type	UNBALANCED			✓
" A x D	138.5 x 4.33			599.7
" Diam. of head	W.I. FORGING 11 1/4	C.M.E.W.		INCLUDES OWNERS EXTRA OF 10%
" Mainpiece at top pintle	11 3/8	W. Gray		APPROV. 11 1/4
" " heel ...	8 3/8	W. Gray		+ b. l.t.
" how constructed	BUILT			✓
" double or single plate	SINGLE			✓
" coupling, vertical or horizontal	HORIZONTAL.			✓

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) **Siemens Martin Open Hearth**

PLATES:— **Best Dowlake Steel and Iron Co., Ltd., Dowlake, Lincs. and Co., Ltd.,** **SECTIONS:**— **Dowlake, Lincs. and Co., Ltd.,** **Best Dowlake Steel and Iron Co., Ltd.,** **Blinningrove Iron Co., Ltd.,** **L. Rylands & Co., Ltd.,** **Consett Iron Co., Ltd.**

Has the Steel been tested as required by the Rules? **YES.** ✓

EQUIPMENT No 40158 ✓										LETTER AT	ANCHORS.							
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.			
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.							
37906	1st Bower ...	68	1	14	STOCKLESS	52	18	3	0	✓	68 ✓	BYERS IMPROVED STOCKLESS	✓	Ind. 18/9/37, Buttr.				
37489	2nd „ ...	68	1	0	✓	-	52	18	2	14	✓	68 ✓	-	✓	- 7/9/37 -			
37510	3rd „ ...	58	3	7	✓	-	47	13	3	0	✓	58 1/2 ✓	-	✓	- 18/9/37 -			
	Collective weight.	195	1	21	✓						✓	194 1/2 ✓						
96761	Stream	19	0	14	✓	4	3	14	✓	19	19	2	21	✓	19 EX. STOCK ✓	RODGERS FORGED W.I.	S. TAYLOR & SONS (Brierley Hill) LTD.	Hett. 30/11/37, Relf.

CHAIN CABLES.										HAWSERS AND WARPS.									
Number of Certificate.	Length and size supplied.		Test per Certificate.	WEIGHT OF CHAIN CABLE.				Length and Size per Table 53.		Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and Size supplied.		Breaking Test of Steel Wire.	Length and Size per Table 53.		
	Fathoms.	Ins.		Supplied.	Per Rule.	Supplied.	Per Rule.	Fathoms.	Ins.					Fathoms.	Ins.		Fathoms.	Ins.	
88968	270	2	100%	14 1/10	269-1-21	✓	✓	270	2 1/16	STUD LINE	S. TAYLOR	Hett. 19/11/38, Relf.	TOWLINE	120	2	703	120	2	✓
88964	90	2			188-0-9	✓	✓				S. TAYLOR & SONS								✓
88966	207	2			29-2-18	✓	✓			TAYCO	(BRIERLEY HILL) LTD.								✓
88969	400	2			2-1-4	✓	✓			ADAPTOR PIECES. MOORING SHACKLES									✓
92435	400	2			5-3-16	✓	✓												✓
		Or.																	✓
Stream Cable - Steel Wire	90	2 1/4	✓	64/6				90	5 1/2	STEEL WIRE.				2290	2 1/4	128			✓

Steering Gear, Type (Power or hand) *Hastic, hydraulic, 5" x 5", Idemator controlled.* Alternative Means of Steering *Blocks and Tackles to aft steam winch.*

Steering Chains (Size and Test) *✓* Windlass *Belcher, Chapman & Co. Ltd., 11" dia x 14" stroke.* Boats *2 @ 28'-0" x 8'-5" x 3'-0" (STEEL) 2 @ 27'-0" x 8'-5" x 3'-0" ✓*

Ceiling in Holds, thickness and material *BILGES AND UNDER HATCHWAYS.* Cargo Battens, thickness, material and spacing *2" THICK, WHITE PINE, 9" ✓*

Cargo Hatchways.-(Upper Deck) *STEEL PLATES AND ANGLES.* Thickness of Hatches *3" WHITE PINE. ✓*

Size of Hatchways No. 1 (Fwd.) *27'-0" x 22'-0" No. 2 33'-6 1/2" x 22'-0" No. 3 15'-9" x 18'-0" No. 4 33'-6 1/2" x 22'-0" No. 5 27'-11 1/2" x 22'-0" No. 6 ✓*

Number of Shifting Beams *Nº 1, FOUR; Nº 2, FIVE; Nº 3, TWO; Nº 4 FIVE; Nº 5 FOUR. ✓*

Builder's Signature *FOR WILLIAM GRAY & CO. LIMITED.*

Wm. S. Simpson
GENERAL MANAGER.

GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel *NO*

(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo *NO* The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation).

This vessel has been built in accordance with the Rules, the approved plans and the Surveyor's letter. The materials and workmanship are good. The double bottom tanks, and fore and after peak tanks have been satisfactorily tested under water pressure as required by the Rules. The weather decks, watertight bulkheads, watertight door and tunnel have been hose tested. The watertight door, steering gear, auxiliary means of steering and windlass have been tried under working conditions and found satisfactory. The hand pumps, forward and aft, have been tried under working conditions and found satisfactory.

Fireworks, in accordance with the Convention Regulations, has been marked on vessel's sides, and in, verified and certificate issued.

The vessel is fitted with "Wireless", and "Electric Light".

The amount of Entry Fee £ 10 : 0 : 0 Fees applied for, (Special notations, where part of class, to be stated.)

Special Survey Fee £ 365 : 11 : 0 Received by me, We are of opinion the Vessel should be Classed *100A1* ✓

Travelling Expenses, if any £ 17 : 0 : 0 11.5 1938 *£12.5* "with freeboard."

State whether the Vessel has been built under Special Survey *YES* Signatures *B. A. Millar and Hugh L. Walker.*
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to *WEST HARTLEPOOL* Date of issue *12/8/38*

Committee's Minute *FRI. 8 APR 1938*

Character assigned *+100A1*
With freeboard
Lloyd's Assoc
W. H. W.

+Lmb. 3.38 2020
Spt.
W.T. B. 18 Survey annually
Lloyd's Register
Foundation

W1144 - 02212

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

DRY DOCKING, 17TH MARCH, 1938. The vessel was placed in the Central Dry Dock, the bottom and rudder examined, cleaned and recoated. ✓

SISTER VESSEL.

WEST HARTLEPOOL REPORT NO. 17786.

S.S. "ITINDA" ✓

PARTICULARS OF ELECTRIC WELDING (if employed)

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

"WITH FREEBOARD", LLOYD'S A & C P, CRUISER STERN.

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower	40 - 3 - 22 ✓	W.H.	6802	16.7.37 ✓
2nd "	40 - 3 - 15 ✓	W.H.	6804	16.7.37 ✓
3rd "	33 - 0 - 12 ✓	J.F.R.	2496	20.8.37 ✓

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 39.04 ft., R.Q.D. ✓ ft., Bridge 132.17 ft., Forecastle 38.57 ft. ✓

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated ✓

Official No. 166382

Signal Letters

Extreme Breadth over Belting (Circ. 1611)

Over-all Length 442.83 FEET. ✓ (Circ. 1703)

No. and Material of Decks 2 DKS (Stl.) ✓

Parts of Bottom of Vessel coated with cement or approved composition ALL INSIDE DOUBLE BOTTOM TANKS. ✓

Particulars of composition (if fitted) and of approval ✓

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	134.67 ✓	335 ✓	Fore peak tank,	20.12	190 ✓
Double bottom, under Engines and Boilers,			After peak tank,	28.00	190 ✓
Double bottom, if under Engines only, FEED WATER.	28.42 ✓	114 ✓	Deep tank, aft,		
Double bottom, if under Boilers only, DRY TANK.	20.33 ✓		Deep tank, forward,		
Double bottom, forward,	185.29 ✓	677 ✓	Other tanks, if fitted,		
Total length (if continuous) and Capacity	365.71	1126	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 2398

Date 10TH MARCH, 1937.

Dates of Surveys held while building

1937 Mar. 2-5 April 29 May 5-19 June 1-8 14-15-17-18-20-25-28-30 July 1-2-6-13 Aug. 10-11-12-19-20-23-24-26-27-30-Sept. 1-2-3-10-14-16-24 Oct. 1-6-14-15-19-20-21-22-27-28-30 Nov. 1-2-4-5-9-10-11-12-16-17-18-19-20-22-26-28-30 Dec. 1-7-9-10-12-14-15-16-17-20-21-30-1938 Jan. 5-7-10-11-17-18-26-27-31 Feb. 2-4-10-16-18-22-24-28 Mar. 1-4-8-9-10-15-16-17-21-22-24.

Total No. of Visits 101.