

STEEL STEAMER OR MOTORSHIP.

15 OCT 1942

Received at London Office

WRECK
SECTIONState 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

14th October 1942Port of *West Hartlepool*

No. 18343

Survey held at *West Hartlepool*Date First Survey *3rd December, 1941*

Last Survey

6th October, 1942

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

*Single Screw**"EMPIRE CENTAUR"*

State Type

(Full, Partial, Complete Superstructure with or without Tonnage Openings)

Complete Superstructure without tonnage openings

State Type of Erections

Forecastle

TONNAGE (under Tonnage Deck)

*6571.98*CLASS ** 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.

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

*L 425'-0"*Launched *30-7-42* Yard No. *1134*

Total

Breadth (greatest moulded)

*B 56'-0"*Builders *William Gray & Co. Ltd.*

Gross Tonnage

7041.34

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

*D 37'-8"*Owners *Ministry of War Transport.*

Register Tonnage

*5024.18*1st Longitudinal Number (L x D) = *15194*Managers *Crosby, Son & Co. Ltd.*

(Where necessary to be entered in Reg. Book.)

2nd Numeral L x (B + D) = *38994*

Residence

REGISTERED DIMENSIONS.
FEET.

Length

431.5

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

*23.3*Port of Registry *West Hartlepool.*

Breadth

56.2

Proportions—Depth to Length—Uppermost continuous deck to top of keel

11.27

If surveyed while building, afloat, or in dry dock

Depth

*35.2*Draught Moulded *26'-7½"**Building, afloat & 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	<i>31</i>	<i>✓</i>	Bracket Floors, Frame	<i>✓</i>	
" " from ⅓ length amidships to Collision bulkhead	<i>27</i>	<i>✓</i>	" " Reversed Frame	<i>✓</i>	
" " in peaks	<i>24</i>	<i>✓</i>	" " Vertical Struts	<i>✓</i>	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<i>43¼ x .54</i>	
Frame Amidships, Angle, [or]	<i>12 x 3½ x 3/16 x 32.9</i>	<i>B.A. (ENDS). 10 ✓ 42.8</i>	" " top Angles	<i>3½ 3½ .48</i>	
" " Extends up to <i>2nd Dk & upper Dk alt.</i>			" " bottom Angles	<i>4 4 .54</i>	
Reversed Frame Amidships, Angle	<i>✓</i>		Side Girders, No. each side and thickness	<i>1</i>	
" " Extends up to	<i>✓</i>		Margin Plate depth (excl. of flange) and thickness	<i>36 .54</i>	
Depth of Framing Girder	<i>12</i>		" " Vertical Angle to Tank side	<i>6 6 .44</i>	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	<i>12 x 3½ x 3/16 x 32.9</i>	<i>(alt. fr.) ✓</i>	" " Bracket abaft ¼ len. from stem <i>Painting Area</i>	<i>6 6 .44</i>	
" " Second 'tween Decks, Angle, [or]	<i>✓</i>		" " Vertical Angle to Tank side	<i>6 6 .44</i>	
" " Third " " " "	<i>✓</i>		" " Bracket from forward ¼ len. from stem to Painting Area	<i>6 6 .44</i>	
" " from ¼ len. for'd. to 15% len. from Stem	<i>12 3½ 9/16</i>	<i>✓</i>	" " Gussets, spacing and scantling abaft ¼ len. from stem	<i>continuous .42</i>	
" " in Peaks, Angle, [or]	<i>8 3½ .35</i>	<i>✓</i>	" " Gussets, spacing and scantling from forward ¼ len. from stem to Painting Area	<i>continuous .42</i>	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 3½ x 7 on bottom 3½ x 6 on sides</i>	<i>✓</i>	Tank Side Brackets, height above base line at toe of Frame and thickness	<i>94/8 .44</i>	
State if Frame Joggled	<i>Yes</i>	<i>✓</i>	INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Painting Area in accordance with the Rules and/or as approved?	<i>Yes</i>	<i>✓</i>	Breadth and thickness of Middle Line Strake	<i>71¼ .52</i>	<i>-50 in dist. vessel</i>
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	<i>Yes</i>	<i>✓</i>	Thickness of remainder in Holds	<i>under hatches .44 .52</i>	
SINGLE 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?	<i>Yes</i>	
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, [or]	<i>8 3½ 20</i>	<i>LBS ✓</i>
Middle Line Keelson, on Floors, Angles, [or]			" " in way of Bridge, Angle, [or]	<i>✓</i>	
" " Through Plate or Intercostal Plate			Spacing	<i>31</i>	
" " Foundation Plate on Floors			Second Deck, amidships, Angle, [or]	<i>9 3½ .38</i>	
" " Flat Plate Keel Angles			Spacing	<i>31</i>	
Side Keelsons, No. each side			Third Deck, amidships, Angle, [or]	<i>✓</i>	
" " thickness of Intercostal Plate			Spacing	<i>✓</i>	
" " Angles			Fourth Deck, amidships, Angle, [or]	<i>✓</i>	
DOUBLE BOTTOM.			Spacing	<i>✓</i>	
Solid Floors, thickness and spacing	<i>Every .42</i>	<i>✓</i>	Poop Deck, Angle, [or]	<i>✓</i>	
" " Are Frame and Reversed Frame joggled?	<i>Yes</i>	<i>✓</i>	Spacing	<i>✓</i>	
Bracket Floors, breadth and thickness at middle line	<i>✓</i>		Bridge Deck, Angle, [or]	<i>✓</i>	
" " breadth and thickness at margin plate	<i>✓</i>		Spacing	<i>✓</i>	
			Forecastle Deck, Angle, [or]	<i>9 3½ .42 6 3 .44</i>	
			Spacing	<i>27 & 24</i>	

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.....		✓		Stringer Plate, breadth and thickness in way of Bridge	✓		
„ in 'tween Decks, Size and Spacing.....				Thickness of Plating abreast Deck openings in way of Wells.....	36	✓	
„ „ „ „ „				Thickness of Plating abreast Deck openings in way of Bridge	✓		
„ in Holds „ „				Thickness of Plating within line of openings...	34	✓	
„ „ „ „ „				If Sheathed, material and thickness	none	✓	
Centre Line Bulkhead.				Third Deck.			
Stiffeners and Spacing.....	12x3 1/2 x 3 1/2 x 309 Ls alternate	✓		Stringer Plate, breadth and thickness.....	✓		
Plating, thickness of	30	✓		If Plated, state thickness.....	✓		
STRINGERS AND DECKS.				Fourth Deck.			
Uppermost Continuous Deck.				Stringer Plate, breadth and thickness.....	✓		
Stringer Plate, breadth and thickness in Wells	65 5/8	65	✓	If Plated, state thickness	✓		
„ „ „ „ in way of Bridge		✓		Poop Deck.			
„ Angle in Wells	6 6	60	✓	Stringer Plate, breadth and thickness	✓		
Thickness of Plating abreast Deck openings in way of Wells	60 2	55	✓	Plating, Sheathing, material and thickness ...	✓		
Thickness of Plating abreast Deck openings in way of Bridge		✓		Bridge Deck.			
Thickness of Plating within line of openings...		40	✓	Stringer Plate, breadth and thickness.....	✓		
If Sheathed, material and thickness	none	✓		Plating, Sheathing, material and thickness ...	✓		
Second Deck.				Forecastle Deck.			
Stringer Plate, breadth and thickness in Wells...	82 3/4	38	✓	Stringer Plate, breadth and thickness.....	36	✓	
				Plating, Sheathing, material and thickness ...	unsheathed 32	✓	

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if joggled? <i>No</i>			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.								
FLAT PLATE KEEL	54	80	70	70		Double	7/8"	3 1/2	Three	7/8	4	Double rtd straps & welded butts all.
" DBLG. (if any)									✓			
BOTTOM PLATING, No. of Strakes 4.....	A B C D	65 60 65 65	50 70 70 50	50		Double	7/8"	3 1/2	Four	7/8	3 1/2	lapped
BILGE PLATING, No. of Strakes 1.....	E F	64 60	50	50		Double	7/8"	3 1/2	Four	7/8	3 1/2	inside straps
SIDE PLATING, No. of Strakes 3.....	G H	60 65	45	45		Double	7/8	3 1/2	Three	7/8	3 5/32	lapped
UPPER DECK, Sheer- strake in Wells.....	77 1/2	73	46	46		Double	7/8	3 1/2	Four	1	4	lapped
UPPER DECK, Sheer- strake in Bridge ...		✓							✓			
STRAKE BELOW Sheer- strake in Wells.....		65	46	46		Double	7/8	3 1/2	Three	7/8	3 5/32	lapped
STRAKE BELOW Sheer- strake in Bridge ...		✓							✓			
POOP SIDE PLATING.....		✓							✓			
BRIDGE SIDE PLATING...		✓							✓			
FORE'TLE SIDE PLATING			40			Single	3/4	3	One	3/4	2 5/8	lapped

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	collision bhd. to weather deck
Extending to Upper Deck (Sec. 3 c)	6 W.T. bhd's to 2nd deck
Deck next below	6 divisional W.T. bulkheads in tween decks.
As per Rule	for closing of opening in to. dk Bld's see page 4 of this report.

			Plating Thickness.	STIFFENERS.			
				VERTICAL.		HORIZONTAL.	
				Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks			• 26 ✓	5 x 3 x • 42	30 ✓		
"	"	Second "	✓				
"	"	Third "	✓				
"	"	Holds	39 - 30	12 x 3 1/2 x 3 1/2" L ⁶⁵	29 30 ✓	- 2	
COLLISION " (in Hold)			53 - 29	10 x 3 1/2 x • 44 L	29 30 ✓		
AFTER PEAK " "			48 - 75 - 30	6 1/2 x 3' x • 50 A	24 ✓		
				9 1/2 x 3' x • 28 L	24 ✓		
				6 1/2 x 3 x • 30 A	24 ✓		

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar		✓		
STEM <i>rolled bar</i>		$10\frac{1}{2} \times 2\frac{1}{2}$	✓	
STERN FRAME { Propeller Post	} Fabricated steel	boliville	Constr. Co.	
{ Rudder "				
Speed of Vessel		$10\frac{1}{2}$ K	✓	
RUDDER—Type	Ordinary	✓		
" A × D		578	✓	
" Diam. of head	Forged iron	$11\frac{5}{8}$	CMEW	
" Mainpiece at top pintle	as per			
" " heel	approved plan			
" how constructed	Fabricated steel		boliville Constr. Co.	
" double or single plate	double	✓		
" coupling, vertical or	vertical	✓		
" horizontal				

STEEL. Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *open hearth*
Dorman Long & Co. Ltd., South Durham Steel & Iron Co. Ltd., Cargo Fleet Iron Co. Ltd.
Skinningrove Iron Co. Ltd. & Bonsett Iron Co. Ltd.
Has the Steel been tested as required by the Rules? *Yes.*

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.)

Forging reports are enclosed. This vessel is of the fabricated "B" type design similar to the "Empire Clarion" (Wm Gray & Co 1133) & previous ships. Fabricated material was supplied as follows:— Eng. & Boiler casings, Saloon & Capt. House, Boat & Side Houses, Machy. Intercostals & side Girders by John Booth & Sons Ltd. Main Hatch & 2nd deck stringer chock plates by C & W. Walker Ltd. Side Bunkers by A & J. Main Deck Girders by Clayton Son & Co. Cabin Store Bkds., Coal & Escape Hatches, Strong Beam & Side Webs by E & J. Keay, Ltd. Upper & 2nd Deck Plating, Tank Top Plating by Francis Morton. Side Frames by Motherwell Bridge & Eng. Co. Hatch Webs, Midship Floors, Keel & Centre Girders by Edward Wood & Co Ltd. Flat shell plates by Dorman Long & Co Ltd. Tunnel & Upper Deck stringer angles by Fairfield Shipbuilding & Eng. Co. Tank Margin, Gusset & Bracket plates by R & J Dempster Ltd. Upper & 2nd Deck Beams & 24 curved shell plates by Palmers Hebburn Co. Ltd.

Closing of openings in divisional watertight bulkheads in tween decks:— The access & tonnage openings in bkds. 133, 109, 57 & 34 are closed by riveted watertight plates. The openings in bkds. 14 & 87 are closed by hinged watertight steel doors operated from both sides.

PARTICULARS OF ELECTRIC WELDING (if employed)

Alternate keel butts welded by fabricators. Rudder & Sternframe of fabricated welded construction by Colville Construction Co. Bilge keel welded to shell. Bulkhead stiffener brackets welded to tank top. Gusset plates welded to tank top amidships. Tween deck chock plates between frames amidships welded to deck stringer. Tunnel butts & stiffeners welded. All welding carried out with approved electrodes.

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

2 decks. D.F. Cargo battens not fitted. Notation about equipment. E.S.D. with freeboard Collision bulkhead to weather deck. 6 bulkheads to 2nd deck. 6 divisional W.T. bulkheads in 'tween decks

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	Weight incl. pins	Surveyor	No. of test.	Date of cert.
1st Bower	44-1-0	S.P.R.	4828	12-5-42
2nd "	45-0-0	K.L.	4847	5-6-42
3rd "	✓			

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. ✓ ft., Bridge ✓ ft., Forecastle 39'5" on upper deck

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated ✓
Official No. 168946 Signal Letters Extreme Breadth over Belting ✓ Over-all Length 446'4" (Circ. 1611) (Circ. 1703)
No. and Material of Decks 2 decks - steel.
Parts of Bottom of Vessel coated with cement or approved composition F & A. Peak Tanks, & D.B. tank under boilers cemented. Remainder of tanks - cement fillets.
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.	S.W. Water Capacity. Tons.	Where Fitted.	Length. Feet.	S.W. Water Capacity. Tons.
Double bottom, aft,	111.1	302	Fore peak tank,	21.5	119
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	18.0	123
Double bottom, if under Engines only,	28.4	132	Deep tank, in Eng. Room (P&S).	23.25	198 F
Double bottom, if under Boilers only,	18.1	dry	Deep tank, forward,		200 S
Double bottom, forward,	209.7	821	Other tanks, if fitted,		
Total length (if continuous) and Capacity	367.3	1255	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 2450

Date 18/9/41.

Dates of Surveys held while building

1941. December 3. 12. 18. 24. 1942. January 6. 13. 14. 16. 20. 21. 27. February 4. 6. 9. 11. 13. 17. 19. March. 2. 4. 11. 16. 19. 25. April 1. 7. 9. 14. 16. 22. 30. May 4. 6. 13. 15. 18. June 4. 9. 16. 23. 24. 25. 30. July 2. 3. 4. 6. 8. 10. 13. 14. 15. 17. 20. 23. 27. 28. 29. 30. 31. August 10. 12. 17. 21. 31. September 1. 3. 7. 11. 16. 18. 24. 25. 26. 28. 29. 30. October 1. 2. 3. 5. 6.

Total No. of Visits 84