

RECEIVED

12 OCT 1945

IN D.O.

Rpt. 1.

STEEL STEAMER ~~OF~~ MOTORSHIP.

Received at London Office

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

State if Report is sent on the Machinery of the Vessel

Date of completion of report 6th OCTOBER 1945 Port of GLASGOW. No. 70023

Survey held at GRANGEMOUTH. Date First Survey 15th DECEMBER 1944 Last Survey 25th SEPTEMBER 1945

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) SINGLE SCREW "EMPIRE JEWEL". MACHINERY AFT.

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) FULL SCANTLING. State Type of Erections POOP, TRUNK AND FORECASTLE.

TONNAGE under Tonnage Deck... 1752.22. CLASS +100A.1. State if with freeboard as condition of Class No. Built at GRANGEMOUTH.

Do. of space or spaces between Tonnage Dk. and Upper Dk. Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1d) L 287.0. Launched 12th JUNE 1945 Yard No. 462.

Total 1752.22. Breadth (greatest moulded) B 44.0. Builders THE GRANGEMOUTH DOCKYARD CO. LD.

Gross Tonnage 2370.49. Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 19.5. Owners THE MINISTRY OF WAR TRANSPORT.

Register Tonnage 1281.29. 1st Longitudinal Number (L x D) (287 x 19.5) = 5596. Managers HADLEY SHIPPING CO. LD. (Where necessary to be entered in Reg. Book.)

REGISTERED DIMENSIONS. FEET. Residence 53, LEADENHALL ST., LONDON. E.C.3.

Length 290.7. Port of Registry GRANGEMOUTH.

Breadth 44.1. If surveyed while building, afloat, or in dry dock

Depth 19.15. Draught Moulded 17.12. BUILDING, AFLOAT AND IN DRYDOCK.

FRAMES, DOUBLE BOTTOM AND BEAMS.

LONGITUDINAL FRAMING AS PER PAGE 5.		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		24		Bracket Floors, Frame			
" " from 1/3 length amidships to Collision bulkhead		18		Reversed Frame			
" " in peaks		24		Vertical Struts			
SIDE FRAMING.				Centre Girder, depth and thickness amidships		59 1/2 x 42	
Frame Amidships, Angle, E or F		7 3 34		" " top Angles			Welded direct to tank top
Extends up to		Upper Deck		" " bottom Angles			Welded direct to flat plate keel
Reversed Frame Amidships, Angle				Side Girders, No. each side and thickness		One	34
Extends up to				Margin Plate depth (excl. of flange) and thickness			
Depth of Framing Girder				" " Vertical Angle to Tank side			Inner bottom in Engine Space only
Frames in Uppermost Continuous (tween) Decks, Angle, E or F				" " Bracket abaft 1/4 len. from stem			and carried out level to ship's side
" " Second tween Decks, Angle, E or F				" " Vertical Angle to Tank side			and bulk of side frames electric welded thereto
" " Third				" " Bracket from forward 1/4 len. from stem to Panting Area			
" " from 1/2 len. for'd. to 15% len. from Stem		8 3 35 1/2		" " Gussets, spacing and scantling abaft 1/4 len. from stem			
" " in Peaks, Angle, E or F		6 3 30		" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area			
Diameter and Spacing of Rivets through Frame and Shell Plating amidships		3/4 R. spaced 4 1/2 apart		Tank Side Brackets, height above base line at toe of Frame and thickness		None	
State if Frame Joggled		E Yes		INNER BOTTOM PLATING. IN DOUBLE BOTTOM			
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?		As approved		Breadth and thickness of Middle Line Strake		125" x 1.0"	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?		As approved		Thickness of remainder in Hold		40"	
Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. or F. space and framing in Boiler and Boiler Room?				BEAMS.			
INGLE BOTTOM. IN BOILER SPACE.				Uppermost Continuous Deck, amidships			Longitudinal Beams - See Page 5
Floors, Depth and thickness at mid-line		29 x 52	level across	" " in Well, Angle, E or F		6 3 30 BA	
Height of Brackets at side above base line at toe of frame		5-6"	in way of bunker	" " in way of Bridge, Angle, E or F		6 3 34 BA	
Middle Line Keelson, on Floors, Angles, E or F		6 4 48	Double	Spacing		Every frame	
" " Through Plate		56		" " in way of Forecastle		6 3 34 BA	
" " Intercoastal Plate				Second Deck, amidships, Angle, E or F		5 3 34 BA	
" " Foundation Plate on Floors		12 x 55		Spacing		Every frame	
" " Flat Plate Keel Angles		Welded direct to flat plate keel		Deep Tank Top Forward		8 3 48 BA	
Side Keelsons, No. each side		One		Third Deck, amidships, Angle, E or F		7 3 33 BA	
" " thickness of Intercoastal Plate		48		Spacing		Every frame	
" " Angles		Welded direct to shell and floors		Fourth Deck, amidships, Angle, E or F			
DOUBLE BOTTOM. IN ENGINE SPACE.				Spacing			
Solid Floors, thickness and spacing		34. Every frame		Poop Deck, Angle, E or F		5 3 30 40	at casing sides
" " Are Frame and Reversed Frame joggled?		Frames only		Spacing		Every frame	
Bracket Floors, breadth and thickness at middle line				Trunk Top			Longitudinal Beams - See Page 5
" " breadth and thickness at margin plate				Bridge Deck, Angle, E or F		6 3 34	
				Spacing		Every frame	
				Forecastle Deck, Angle, E or F		5 3 40	
				Spacing		Every frame	

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		
„ „ „ „ „			Thickness of Plating abreast Deck openings in way of Bridge		
„ in Holds „ „			Thickness of Plating within line of openings.....		
„ „ „ „			If Sheathed, material and thickness		
Centre Line Bulkhead.			Third Deck.		
Stiffeners and Spacing.....			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 Well.....			If Plated, state thickness.....		
„ „ „ „ in way of Bridge			Poop Deck.		
„ „ „ „ „			Stringer Plate, breadth and thickness		
Angle in Wells			Plating, Sheathing, material and thickness		
Thickness of Plating abreast Deck openings in way of Wells			Bridge Deck. Trunk Top.		
Thickness of Plating abreast Deck openings in way of Bridge			Stringer Plate, breadth and thickness.....		
Thickness of Plating within line of openings.....			Plating, Sheathing, material and thickness		
If Sheathed, material and thickness			Forecastle Deck.		
Second Deck. Deep Tank Top Forward.			Stringer Plate, breadth and thickness.....		
Stringer Plate, breadth and thickness in Wells.....			Plating, Sheathing, material and thickness		

SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	UPPER EDGES. State if joggled? NO			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth Inches.	Thickness. Inches.	Thickness. Inches.	Thickness. Inches.			Diam. Inches.	Spacing cr. to cr. Inches.		Diam. Inches.	Spacing cr. to cr. Inches.	
FLAT PLATE KEEL	50	65	55	55	Approved 50" at ends	Double	7/8	3 3/4	At ends 3	Welded amidships 7/8	3 3/4	2 lapped and 2 strapped
" DBLG. (if any)												
BOTTOM PLATING, No. of Strakes 3	2 @ 1 @	46 48	40 40	46 46	Approved 40" at ends	Double	3/4	2 3/4	At ends 3-2	Welded amidships 3/4	2 3/4	Lapped
BILGE PLATING, No. of Strakes		46	40	46	" 40" " "	Double	3/4	2 3/4	At ends 3-2	Welded amidships 3/4	2 3/4	Lapped
SIDE PLATING, No. of Strakes		44	40	46	" 40" " "	Double	3/4	2 3/4	At ends 3-2	Welded amidships 3/4	2 3/4	Lapped
UPPER DECK, Sheer- strake in Wells	48	46	45	40	" 40" " "	-	-	-	At ends 3-2	Welded amidships 3/4	2 3/4	Lapped
UPPER DECK, Sheer- strake in Bridge ...												
STRAKE BELOW Sheer- strake in Wells	66	44	40	40		Double	3/4	2 3/4	At ends 3-2	Welded amidships 3/4	2 3/4	Lapped
STRAKE BELOW Sheer- strake in Bridge ...												
POOP SIDE PLATING				33		Single	3/4	3	1	3/4	2 3/4	Lapped
BRIDGE SIDE PLATING ...												
FOREC'TLE SIDE PLATING			35			Single	3/4	3	1	3/4	2 3/4	Lapped

WATERTIGHT BULKHEADS.

OT. and
Total No. of **W.T. BULKHEADS** in Vessel— **11**. ✓ *11 BH for record*
Extending to **Trunk Top** (Sec. 3 c) **9** — *hull*
Upper Deck next below **2** — *upper*
As per Rule **approved**.

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar				
STEM				
STERN FRAME				
Propeller Post	Forging.	8" x 5"	1.9. Horster	
Rudder	Forging.	8" x 5"	and Sons, Ltd.	
Speed of Vessel		10.5 K		
RUDDER—Type		Ordinary double plate		
A x D		273		
Diam. of head	Forging	9'	1.9. Horster and Sons, Ltd.	
Mainpiece at top pintle		Built of steel plates with plate		
" " heel		arms. Of welded construction.		
how constructed				
double or single plate		Double plates 45" thick.		
coupling, vertical or horizontal		Horizontal		

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
OT.						
MIDSHIP BULKH'D,	Upper tween decks					
"	" Second "					
"	" Third "					
"	" Holds 4r. 73....	38"	8" x 3" x 35 BA.	28	1 stringer 24" x 40" with 10th 24" x 50" BA. for bar.	9' 0" above
COLLISION	" (in Hold) 4r. 136....	38" - 26"	9" x 3" x 36 BA. and 8" x 3" x 36 BA.	24	Deep Tank Hat	
AFTER PEAK	" " 4r. 8....	44" - 30"	9" x 3" x 36 BA. and 4" x 3" x 30 O.A.	24"	1 stringer 27" x 34" 4" PL.	16' 3" above base.

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. Ld. *Cargo Fleet Iron Co. Ld.* *South Durham Steel and Iron Co. Ld.* *Colville Ld.* *Comett Iron Co. Ld.*

Bairds and Scottish Steel Ld. *The Lanarkshire Steel Co. Ld.*

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

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.		AMIDSHIPS.			ENDS.			Any Departure from Approved Plans to be Noted.	RIVETING.				
		In Ship.			In Ship.				Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads, Inches.	Rivets in Brackets to Bulkheads.	
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.		Diam. Ins.	Speng. Ins.		Number.	Diameter. Inches.
Framing of L or E at Trunk Side.													
Frames in Bridge between Decks		7	3	34	7	3	34	spaced 26" apart.	3/4	4 1/2			
Frames from Uppermost Continuous Deck	No. 1	10	3 1/2	48	10	3 1/2	48		"	"	8 rivets each side of transverse and bulkheads spaced 3/8"	Welded.	
	" 2		"			"			"	"		"	
	" 3		"			"			"	"		"	
	" 4		"			"			"	"		"	
	" 5		"			"			"	"		"	
	" 6		"			"			"	"		"	
	" 7	10	3 1/2	48	10	3 1/2	48		3/4	4 1/2	8 rivets each side of transverse and bulkheads spaced 3/8"	Welded.	
	" 8												
	" 9												
	" 10												
	" 11												
	" 12												
	" 13												
	" 14												
	" 15												
	" 16												
Spacing of Longitudinal Frames	At Bottom		28			28							
Double Bottoms	Tank Top Longitudinals												
	Bottom												
	Amidships												
	At ends												
Transverses.													
Trunk Side	Depth and Thickness	21" x 15" x 40"		21" x 15" x 40"									
	Face Angles	Flanged 5"		Flanged 5"									
	Lugs to Shell	3 3 40		3 3 40					3/4	3 3/4	No Trunk Side		
Side (in Hold)	Depth and Thickness	21" x 40"		21" x 40"									
	Face Angles	5 3 44.0 A Single		5 3 44.0 A Single									
	Lugs to Shell	Welded		Welded									
Bottom	Depth and Thickness	33" x 40"		33" x 40"									
	Face Angles	9 3 46 B A Single		9 3 46 B A Single									
	Lugs to Shell	Welded		Welded					3/4	3 3/4			
	Back Bars												
	Brackets	3-3 x 3-6 x 40 3/8"		3-3 x 3-6 x 40 3/8"									
	Spacing of Transverse Frames	8'-0"		8'-0"									
Longitudinal Beams of L or E	Trunk Top	7 3 34						Spacing.					
	Bridge Deck							28"					
	Upper	7 3 34						28"					
	Second												
	Third												
	Transverse Beams.												
	Plate.	15" x 36"		15" x 36"									
	Face Angles.	Flanged 5"		Flanged 5"									
	Any departure from Approved Plans to be Noted.												

The particulars of framing in peaks (if ordinary), Floors, Centre Girders, Side Girders and Margin-Plate and their angle attachments, &c., to be entered in their respective places provided for on the Report Forms.

NOTE.—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, &c., on the first page.

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.)

The following plans are applicable to this vessel and are forwarded herewith:

The following Towing and Dredging Certificates are forwarded herewith:

Midship Section
Profile and Decks.
After End Framing.
Fore End Framing, Hats and Stringers.
Oil Fuel Bunkers.
Break of Shell at Poop and Forehead.
Riveting List.
Welding List.
Stemframe and Rudder.
Connection of Trunk Side Plating to Trunk Top Plating.

Stemframe.
Rudder Head and Couplings.
Mast.
Quadrant.

Plan of "as fitted" Midship Section forwarded in advance.

This vessel is a sister ship to the S.S. EMPIRE PYM built by the same Builders in March 1944, see Glasgow Report N° 68260 dated 3rd April 1944, and also to the S.S. EMPIRE JUMNA built by the same Builders in January 1945, see Glasgow Report N° 68254 dated 27th January 1945.

PARTICULARS OF ELECTRIC WELDING (if employed) Butts of flat plate keel, bottom shell, side shell, deck, trunk side and trunk top. Butts of centre line bulkhead, centre line bulkhead to flat plate keel; brackets to centre line bulkhead stiffeners, to bottom longitudinals and to transverse bulkhead stiffeners. Stringers to side shell, centre line bulkhead and transverse bulkheads. Bottom and side transverses to shell plating, also butts of transverses. Trunk side to upper deck; trunk top to trunk side. Poop and forecastle front to deck and trunk side. Pump room entrance to trunk top. Oil cargo hatches and cargo hatch to fore hold. Tank top in engine room. Upper deck to shell in way of poop and forecastle. Oiltight and watertight flats to shell forward. Also other details.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book Longitudinal Framing at Bottom, at Deck and in Trunk.
Butts of shell plating, except at ends and butts of deck plating, electric welded. Lloyd's A. and C.P. Machinery Aft. Cruiser Stern. Wireless. Echo-Sounding.
Direction Finder.
(1 bow anchor to be supplied at the conclusion of the present emergency.)

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	25 · 3 · 16	A.E.G. :	5466	:	31.12.43.
	2nd "	26 · 0 · 7	A.E.G. :	5986	:	2.6.44.
	3rd "					

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 74 · 8 ft., Trunk R.C.D. 178 · 0 ft., Bridge — ft., Forecastle 39 · 0 ft.
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 180365 Signal Letters Extreme Breadth over Belting (Circ. 1611) Over-all Length (Circ. 1700) 301' · 9" ✓
No. and Material of Decks One Steel
Parts of Bottom of Vessel coated with cement or approved composition Peaks, Boiler Room and Pumproom. Double bottom tank in engine room cement washed.

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. S.W.	Where Fitted.	Length. Feet.	Water Capacity. Tons. S.W.
Double bottom, aft,			Fore peak tank,	16 · 5	33 · 0
Double bottom, under Engines and Boilers,			After peak tank,	16 · 0	63 · 5
Double bottom, if under Engines only,	26 · 0	41 · 0	Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,	20 · 0	122 · 0
Double bottom, forward,			Other tanks, if fitted,	3 · 0	40 · 0
Total length (if continuous) and Capacity	26 · 0	41 · 0	(If necessary, furnish further information by sketch.)	3 · 0	84 · 0

Order for Special Survey No. 6739
Date 22.3.44
Diploma of Surveys held while building
1944 Dec 15, 25 1945 Jan 8, 18, 26 Feb 1, 7, 9, 14, 22, 27 Mar 6, 13, 15, 21, 22, 27, 29 Apr 3, 6, 11, 23, 30 May 3, 6, 16, 18, 20, 24, 30 Jun 4, 7, 8, 12, 20, 29 Jul 3, 6, 9, 19, 27 Aug 2, 7, 10, 13, 20, 24, 27, 29, 30, 31 Sep 2, 3, 4, 5, 6, 7, 12, 13, 15, 22
Lloyd's Register Foundation
Total No. of Visits 62