

## STEEL STEAMER or MOTORSHIP.

Received at London Office 10 FEB 1926

State if Report has been sent on the Freeboard of the Vessel YESState if Report is sent on the Machinery of the Vessel YESDate of completion of report 4th February, 1926.Port of GREENOCK.No. 18500.Survey held at PORT GLASGOW.Date First Survey 20th November 1924.Last Survey 3rd February 1926.On the (State if Machinery fitted Aft and  
if Single, Twin or Triple Screw)SINGLE SCREW "GRAIGWEN"State Type (Full Scantling, Complete Superstructure  
with or without Tonnage Openings)FULL SCANTLING.State Type of Erections POOP, LONG BRIDGE,  
& FORECASTLETONNAGE under  
Tonnage Deck... 3505.05CLASS + 100 A1State if with freeboard  
as condition of Class NoBuilt at PORT GLASGOWDo. 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 (1a) L 363.0Launched OCT 6th 1925 Yard No. 366

Total

Breadth (greatest moulded) B 51.32Builders ROBERT DUNCAN & CO LTDGross Tonnage 3697.40Depth, at middle of length from top of keel to top  
of beam at side of uppermost continuous  
deck. See Sec. 3 (1c) D 25.00Owners THE GRAIG SHIPPING COMPANY LTDRegister Tonnage 2277.031st Longitudinal Number (L x D) = 9075Managers LOWAL WILLIAMS & COY.

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

2nd Numeral L x (B + D) = 27707.79Residence IMPERIAL BUILDINGS, MOUNT STUARTREGISTERED DIMENSIONS.  
FEET.Framing Depth "d," at middle of length. See  
Sec. 3 (1d) 21.854Port of Registry CARDIFF.Length 365Proportions—Depth to Length—Uppermost con-  
tinuous deck to top of keel 14.52

If surveyed while building, afloat, or in dry dock

Breadth 51.5Do. Long Bridge to top  
of keel 11.34BUILDING AND AFLOAT.Depth 23.0Draught Moulded Top of Keel 21-11

## 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.
<b>FRAMES, Spacing amidships</b> .....	30"		<b>Bracket Floors, Frame</b> .....	BA... 8 3/2 .42	
" " from 1/2 length to Collision bulkhead .....	27"		" " Reversed Frame .....	BA... 7 1/2 3 .42	
" " in peaks .....	24"		" " Vertical Struts .....	BA... 7 1/2 3 .42	
<b>SIDE FRAMING.</b>			<b>Centre Girder, depth and thickness amidships</b>	36 1/2 .48	
<b>Frame Amidships, Angle, E or C</b> .....	11 1/2 3 1/2 .48		" " top Angles .....	3 1/2 3 .46	3 x 3 x .46
" " Extends up to .....	UPPER DK.		" " bottom Angles .....	4 4 .52	
<b>Reversed Frame Amidships, Angle</b> .....	B.A. FRAMES		<b>Side Girders, No. each side and thickness</b> .....	1 @ .36	
" " Extends up to .....	✓		<b>Margin Plate</b> depth (excl. of flange) and thickness .....	33 .46	
<b>Depth of Framing Girder</b> .....	11 1/2		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem .....	6 6 .42	
<b>Frames in Uppermost Continuous 'tween</b> <b>Decks, Angle, E or C</b> .....			" " Vertical Angle to Tank side Bracket forward 1/2 len. from stem .....	6 6 .42	
" " <b>Second 'tween Decks, Angle, E or C</b>			" " Gussets, spacing and scantling abaft 1/2 len. from stem .....	NONE	
" " <b>Third " " " "</b>			" " Gussets, spacing and scantling forward 1/2 len. from stem .....	GUSSETS EVERY FRAME .36	
<b>Framing in Peaks, Angle or C</b> .....	7 3 .32		<b>Tank Side Brackets, height above base line</b> at toe of Frame and thickness	69 1/2 x .44	
<b>Diameter and Spacing of Rivets through</b> <b>Shell Plating</b> .....	7/8 ABOUT 5/4		<b>INNER BOTTOM PLATING.</b>		
<b>State if Frame Joggled</b> .....	YES.		<b>Breadth and thickness of Middle Line Strake</b> ...	72 .44	
<b>PAINTING ARRANGEMENTS</b> (Sec. 7), state system and particulars	3 WEB FRAMES & 3 STRINGERS AS PER APP PLAN.		<b>Thickness of remainder in Holds</b> .....	.42	
<b>TRENGTHENING OF BOTTOM FOR</b> <b>WARD.</b> State Particulars .....	AS PER APP PLAN AND RULES.		<b>Are Rule requirements complied with regarding</b> <b>increases of scantlings in way of double</b> <b>bottom in E. &amp; B. space and framing in</b> <b>Bunkers and Boiler Room?</b> .....	YES.	
<b>ANGLE BOTTOM.</b>			<b>BEAMS.</b>		
<b>Floors, Depth and thickness at mid-line in</b> <b>Holds</b> .....			<b>Uppermost Continuous Deck, amidships</b> <b>in Wells, Angle, E or C</b> .....	11 3 1/2 x .51 10 1/2 x 3 1/2 x .47	
<b>Height of Brackets at side above</b> <b>base line at toe of frame</b> .....			" " <b>in way of Bridge, Angle,</b> <b>E or C</b> .....	11 11 3/2 x .51 10 1/2 x 3 1/2 x .43	
<b>Middle Line Keelson, on Floors, Angles</b> <b>E or C</b> .....			<b>Spacing</b> .....	30"	
" " <b>Through Plate or</b> <b>Intercostal Plate</b> .....			<b>Second Deck, amidships, Angle, E or C</b> .....		
" " <b>Foundation Plate on</b> <b>Floors</b> .....			<b>Spacing</b> .....		
" " <b>Flat Plate Keel Angles</b>			<b>Third Deck, amidships, Angle, E or C</b> .....		
<b>Side Keelsons, No. each side</b> .....			<b>Spacing</b> .....		
" " <b>thickness of Intercostal Plate</b> .....			<b>Fourth Deck, amidships, Angle, E or C</b> .....		
" " <b>Angles</b> .....			<b>Spacing</b> .....		
<b>DOUBLE BOTTOM.</b>			<b>Poop Deck, Angle, E or C</b> .....	7 3 .36 8 1/2 x 3 x .46	
<b>Solid Floors, thickness and spacing</b> .....	.39 @ 60"	.36	<b>Spacing</b> .....	EVERY FRAME ALTERNATE	
" " <b>Are Frame and Reversed Frame</b> <b>joggled?</b> .....	YES.		<b>Bridge Deck, Angle, E or C</b> .....	9 3 .46 8 1/2 x 3 x .38	
<b>Bracket Floors, breadth and thickness at</b> <b>middle line</b> .....	42" x .38	.36	<b>Spacing</b> .....	30"	
" " <b>breadth and thickness at</b> <b>margin plate</b> .....	54 x .36	.36	<b>Forecastle Deck, Angle, E or C</b> .....	7 3 .42 10 1/2 x 3 1/2 x .42	
			<b>Spacing</b> .....	EVERY FRAME ALTERNATE	



## 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.	
<b>PILLARS, No. of Rows.....</b>		CENTRE LINE									
,, in 'tween Decks, Size and Spacing.....		BULKHEAD IN									
,, ,, ,, ,, ,,		HOLDS AND									
,, in Holds ,, ,,		TWN DECKS									
,, ,, ,, ,, ,,		- - -									
<b>Centre Line Bulkhead.</b>											
Stiffeners and Spacing.....		10 1/2	3 1/2	46	BA SPACED 60"						
Plating, thickness of .....		.30									
<b>STRINGERS AND DECKS.</b>											
<b>Uppermost Continuous Deck.</b>											
Stringer Plate, breadth and thickness in Wells		66	.70								
,, ,, ,, ,, in way of Bridge		66	.36								
,, Angle in Wells .....		7	7	.84							
Thickness of Plating abreast Deck openings } in way of Wells .....		.33									
Thickness of Plating abreast Deck openings } in way of Bridge .....		.33									
If Sheathed, material and thickness .....		NONE									
<b>Second Deck.</b>											
Stringer Plate, breadth and thickness in Wells...											
Stringer Plate, breadth and thickness in way of Bridge											
Thickness of Plating abreast Deck openings } in way of Wells .....											
Thickness of Plating abreast Deck openings } in way of Bridge .....											
If Sheathed, material and thickness .....											
<b>Third Deck.</b>											
Stringer Plate, breadth and thickness.....											
If Plated, state thickness.....											
<b>Fourth Deck.</b>											
Stringer Plate, breadth and thickness.....											
If Plated, state thickness .....											
<b>Poop Deck.</b>											
Stringer Plate, breadth and thickness .....											
Plating, Sheathing, material and thickness .....											
<b>Bridge Deck.</b>											
Stringer Plate, breadth and thickness.....											
Plating, Sheathing, material and thickness .....											
<b>Forecastle Deck.</b>											
Stringer Plate, breadth and thickness.....											
Plating, Sheathing, material and thickness .....											

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged? <b>NO</b>			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 .....	47	.68	.62	.62		DOUBLE	7/8	3 1/3	TREBLE	7/8	3 1/8	LAPPED
„ DBLG. (if any)												
BOTTOM PLATING, No. of Strakes .....	THREE	.59	2@.56 @.44	.50		—	7/8	3 1/3	—	7/8	3 1/8	—
BILGE PLATING, No. of Strakes .....	TWO	.59	.44	.50		—	7/8	3 1/3	—	7/8	3 1/8	—
SIDE PLATING, No. of Strakes .....	TWO	.59	.42	.48		—	7/8	3 1/3	—	7/8	3 1/8	—
UPPER DECK, Sheer-strake in Wells.....	49"	.76	.42	.46		—	7/8	3 1/3	QUADRUPLE	1"	4"	—
UPPER DECK, Sheer-strake in Bridge ...		.59				—	7/8	3 1/3	TREBLE	7/8	3 1/8	—
STRAKE BELOW Sheer-strake in Wells.....	68"	.60	.42	.46		—	7/8	3 1/3	—	7/8	3 1/8	—
STRAKE BELOW Sheer-strake in Bridge ...		.59				—	7/8	3 1/3	—	7/8	3 1/8	—
POOP SIDE PLATING .....				.36		SINGLE	3/4	3	SINGLE	3/4	2 5/8	—
BRIDGE SIDE PLATING ...	78	.62				DOUBLE	7/8	3 1/3	TREBLE	7/8	3 1/8	—
FOREC'TLE SIDE PLATING			.40			SINGLE	3/4	3	SINGLE	3/4	2 5/8	—

## WATERTIGHT BULKHEADS.

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

Extending to Upper Deck (Sec. 3 c).....Six

Deck next below.

As per Rule.....Six.

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
<b>MIDSHIP BULKHEAD,</b>	Tween decks...					
"	" "					
"	" "					
"	" "					
"	" "					
"	" "					
"	" "					
"	" "					
"	Holds .....	✓ 44-26	CHAN. 12x3½x46	30"	✓	✓
<b>COLLISION</b>	(in Hold) ....	✓ 48-26	B.A. 9½x3½x52	24"	SEMI-BON BEAM	
<b>AFTER PEAK</b>	" " ....	✓ 50-30	B.A. 7x3x38	24"	TUNNEL RECESS.	

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
<b>KEEL, Bar</b> .....		FLAT PLATE KEEL.		✓
<b>STEM</b> .....		ROLLED BAR $9 \times 2\frac{3}{8}$	PORTLAND FORGE.	✓
<b>STERN FRAME</b> {	Propeller Post .....	CAST STEEL $9\frac{3}{8} \times 7$	OTTO GRUSEN	✓
	Rudder " .....	" " $8\frac{1}{2} \times 7$	& Co	✓
<b>RUDDER—A × D</b> .....		334.		✓
<b>Speed of Vessel</b> .....		UNDER 10 KNOTS		✓
<b>RUDDER</b> mainpiece at head ...	FORGING	$8\frac{1}{2}$	WITKOW BERGB	✓
" " heel ...	" "	$6\frac{1}{2}$	& E. GEWERTSCHAFT	✓
" how constructed .....		BUILT FORGING.		✓
" double or single plate		SINGLE PLATE 1.04" THICK.		✓
" coupling, vertical or horizontal .....		VERT COUPLING. $8-2\frac{1}{2}$ " BOLTS.		✓
<b>STEEL OPEN HEARTH.</b>				
Manufacturer's name or trade mark of the Steel used in the construction of the Vessel (state process of manufacture) COLVILLE, BEARDMORE, STEEL CO. OF SCOTLAND.				
GLASGOW, D'ATHUS GRIVEGNEE, GUTENHOFF NUNSHÜTTE				
Has the Steel been tested as required by the Rules? YES				



EQUIPMENT No. 29504										LETTER W	ANCHORS.		
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.			
58711	1st Bower	53	1	16	53	1	16	44	8	3	0	STAYLOR & SONS	TIPON 6 3/25 H.C. LEESON
58681	2nd "	52	1	17	52	1	17	43	15	2	14	STAYLOR & SONS	" 23 3/25 W.A. DRYSDALE
58682	3rd "	44	3	7	44	3	7	39	1	3	14	STAYLOR & SONS	" " " "
	Collective weight	150	2	12	150	2	12						
58728	Stream	14	0	3	14	0	3	15	12	2	0	IRON STOCK	" 13 3/25 " "

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.		
	Length.	Diam.	Statu- tory.	Break- ing.	Supplied.	Per Rule.	Length.	Diam.					Length.	Cir.		Length.	Cir.	
3923	270	2 1/6	76 1/10	107 1/10	580	2.14	573 3/4	270	2 1/6	STAYLOR & SONS	GLASGOW 17 1/25 L. HAFNER.	TOWLINE...	Fathoms. 120	Ins. 4 1/2	Tons. 39	Fathoms. 120	Ins. 4 1/2	
Iron Stream Steel Wire	90	Cir. 4 1/2	39					90	Cir. 4 1/2			HAWSERS & WARPS	4 @ 90	2 1/2	12 1/2	4 @ 90	2 1/2	
													"	"	"	"	"	"
													"	"	"	"	"	"

Steering Gear, Steam MACGREGORS, PORT GLASGOW ENGINEERING WORKS LTD. Steering Gear, Hand RELEIVING TACKLE WORKED FROM WINCH.

Boats 2 LIFEBOATS, 1 GIG & 1 DINGHY. Steering Chains, Size and Test 1 3/16 TEST 16 TONS - 18 CWTs. Windlass EMERSON, WALKER & THOMPSON.

Ceiling in Holds, thickness and material 6 x 2 1/2 W.P. IN HOLDS. Cargo Battens, thickness, material and spacing 6 x 2 W.P. SPACED 9"

Cargo Hatchways.-(Upper Deck) STEEL PLATES AND ANGLES. Thickness of Hatches 2 1/2" SOLID.

Size of No. 1 Hatchway (Forward) 27'-0" x 17'-9" No. 2 30'-0" x 17'-9" No. 3 12'-6" x 17'-9" No. 4 27'-6" x 17'-9" No. 5 27'-6" x 17'-9" No. 6 ✓

Number of Shifting Beams and/or Fore and Afters 5 WEBS IN NOS 1 & 5 : 4 WEBS IN NOS 2 & 4 : 2 WEBS IN NO 3.

Builder's Signature *Robert Duncan & Co Ltd*  
*for Alex Kelly*

GENERAL DECLARATION This vessel has been built in accordance with the approved plans and in general conformity with the Society's rules for the class contemplated.

The workmanship is good and the materials used in the vessels construction are also good.

The freeboard has been verified and the marks cut in on the vessels sides.

The double bottom tanks, after peak tank have been tested to the rule requirements and found satisfactory. The fore peak bulkhead has been tested as required by the rules. The weather decks, Watertight bulkheads, and shaft tunnel were hose tested and found satisfactory.

The amount of Entry Fee ..... £ 7 : 0 : 0 Fees applied for,  
Special Survey Fee.... £ 259 : 17 : 0 5.2.1926  
FREEBOARD 9 : 0 : 0 Received by me,  
Travelling Expenses, if any £ 9 : 2 : 1926

I am of opinion the Vessel should be Classed **+100A.1.**

State whether the Vessel has been built under Special Survey **YES.**

Signature *Kenneth Inglis & Co*  
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to **GREENOCK** Date of issue **13/2/26**

Committee's Minute **GLASGOW 9-FEB 1926**

Character assigned **+ 100A.1**

**2,26**

**+ LMC 2 1/2**

*Lloyd's accp*

*60R*



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 approved plans of the vessel together with plans of midship section, an profile and deck plans of vessel as built and reports of cast steel stern frame, forged rudder & tiller are herewith enclosed.

- ✓ Midship Section
- ✓ Profile & Decks.
- ✓ Plan of fore and after peaks and fore end strengthening.
- ✓ Stern frame and rudder.
- Centre line bulkhead.
- Part Midship Section showing modified double bottom.
- Watertight bulkheads.
- ✓ Strengthening at bridge.
- ✓ Quadrant Tiller
- ✓ Masts
- ✓ Pumping arrangement

This vessel is a sister vessel to Messrs Duncan & Co No 355 S.S. "GRAIG" see Greenock report No 18209.

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

1st Bower 31.2.0 : D.D.W: 1105 : 19/18.  
2nd ,, 31.2.14 : D.D.W: 1776 : 16/18.  
3rd ,, 27.3.21 : D.D.W: 1411 : 26/18.

**PARTICULARS FOR RECORD in the REGISTER BOOK.**—Length of Poop 27.08 ft., R.Q.D. ✓ ft., Bridge 220 ft., Forecastle 40.42 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ✓

No. and Material of Decks and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 Dk (Stl.)

Official No. 148,289. ; Signal Letters

If bottom of Vessel has been coated Inside YES.

particulars of composition CEMENT IN DOUBLE BOTTOM. FLOORS ALL CEMENT WASHED.

#### PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	107.5	300	Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		140
Double bottom, if under Engines only,	22'-6"	80	Deep tank, aft,		
Double bottom, if under Boilers only, DRY TANK W.T. Comp.	17'-6"		Deep tank, forward,		
Double bottom, forward,	184.0	490	Other tanks, if fitted,		
	Total capacity of double bottom	870	(If necessary, furnish further information by sketch.)		

\* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 3135

Date 27.10.24

Dates of Surveys held while building

(1924) Nov. 20. 26. Dec. 1. 30. (1925) Jan. 7. 9. 23. 26. Feb. 3. 5. 6. 10. 16. 18. 21. 27. Mar. 9. 17. 21. Apr. 1. 8. 13. 17. 23. 28. May 1. 6. 13. 20. 26. 26. June 1. 4. 8. 9. 10. 11. 12. 17. 18. 25. 29. 30. July 1. 21. 23. 24. 28. 30. Aug. 3. 4. 5. 6. 11. 12. 13. 18. 21. 26. 27. 28. 31. Sept. 3. 15. 16. 17. 22. 24. 30. Oct. 2. 5. 6. Nov. 1. Dec. 11. (1926) Jan. 8. Feb. 3.

Total No. of Visits 77