

REPORT ON MACHINERY.

No. 4166

SAT 17 JAN. 1922

Date of writing Report *5th Jan 1922* When handed in at Local Office *5th Jan 1922* Port of *Dublin*
 No. in Survey held at *Dublin* Date, First Survey *24th Nov 1921* Last Survey *5th Jan 1922*
 Reg. Book. *✓* on the **STEEL SCREW STEAMER 'LADY ANSTRUTHER'** (Number of Visits *9*)
 Master *✓* Built at *Dublin* By whom built *Dublin Shipbuilders Ltd.* Tons { Gross *✓* Net *✓*
 Engines made at *Grathbridge* By whom made *W. Beardon & Co.* When built *1922*
 Boilers made at *Glasgow* By whom made *D. Rowan & Co.* when made *1922*
 Registered Horse Power *✓* Owners *Stoke Explosives Co. Ltd. (of Glasgow)* Port belonging to *Glasgow*
 Nom. Horse Power as per Section 28 *✓* Is Refrigerating Machinery fitted for cargo purposes *No.* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines

No. of Cylinders	No. of Cranks	Length of Stroke	Revs. per minute	Dia. of Screw shaft as per rule	Material of screw shaft
the screw shaft fitted with a continuous liner the whole length of the stern tube	Is the after end of the liner made water tight				
the propeller boss	If the liner does not fit tightly at the part				
between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive	If two				
ers are fitted, is the shaft lapped or protected between the liners	Length of stern bush				
Dia. of Tunnel shaft as per rule	Dia. of Crank shaft journals as per rule	Dia. of Crank pin	Size of Crank webs	Dia. of thrust shaft under	
llars	Dia. of screw	Pitch of Screw	No. of Blades	State whether moveable	Total surface
No. of Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work		
No. of Bilge pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work		
No. of Donkey Engines	Sizes of Pumps	No. and size of Suctions connected to both Bilge and Donkey pumps			
Engine Room	In Holds, &c.				
No. of Bilge Injections	sizes	Connected to condenser, or to circulating pump	Is a separate Donkey Suction fitted in Engine room & size		
Are all the bilge suction pipes fitted with roses	Are the roses in Engine room always accessible	Are the sluices on Engine room bulkheads always accessible			
Are all connections with the sea direct on the skin of the ship	Are they Valves or Cocks				
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates	Are the Discharge Pipes above or below the deep water line				
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel	Are the Blow Off Cocks fitted with a spigot and brass covering plate				
What pipes are carried through the bunkers	How are they protected				
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times					
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges					
the Screw Shaft Tunnel watertight	Is it fitted with a watertight door	worked from			

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers	Is Forced Draft fitted	No. and Description of Boilers
Working Pressure	Tested by hydraulic pressure to	Date of test
Can each boiler be worked separately	Area of fire grate in each boiler	No. and Description of Safety Valves to
Each boiler	Area of each valve	Pressure to which they are adjusted
Are they fitted with easing gear		
Smallest distance between boilers or uptakes and bunkers or woodwork	Mean dia. of boilers	Length
Material of shell plates	Thicknes	Range of tensile strength
Are the shell plates welded or flanged	Descrip. of riveting: cir. seams	
Long. seams	Diameter of rivet holes in long. seams	Pitch of rivets
Lap of plates or width of butt straps	Working pressure of shell by rules	Size of manhole in shell
Per centages of strength of longitudinal joint	No. and Description of Furnaces in each boiler	Material
Outside diameter	Length of plain part	Thickness of plates
Description of longitudinal joint	No. of strengthening rings	
Working pressure of furnace by the rules	Combustion chamber plates: Material	Thickness: Sides
Back	Top	Bottom
Pitch of stays to ditto: Sides	Back	Top
If stays are fitted with nuts or riveted heads	Working pressure by rules	End plates in steam space:
Material of stays	Area at smallest part	Area supported by each stay
Working pressure by rules	Material of stays	
Area at smallest part	Area supported by each stay	Working pressure by rules
Material of Front plates at bottom	Thicknes	Greatest pitch of stays
Working pressure of plate by rules	Diameter of tubes	Pitch of tubes
Material of tube plates	Thickness: Front	Back
Mean pitch of stays	Pitch across wide water spaces	Working pressures by rules
Girders to Chamber tops: Material	Depth and	
Thickness of girder at centre	Length as per rule	Distance apart
Number and pitch of stays in each	Working pressure by rules	Steam dome: description of joint to shell
% of strength of joint	Diameter	Thickness of shell plates
Material	Description of longitudinal joint	Diam. of rivet holes
Pitch of rivets	Working pressure of shell by rules	Crown plates
Thickness	How stayed	

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____

Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____

Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

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W995-0153

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - -
During erection on board vessel - - -
Total No. of visits

1921:- Nov^r 24, 26, 28, 29, Dec 2, 9, 13, 31, 1922:- JAN 5,
FOR THIS SURVEY 9.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Rods

Connecting rods

Crank shaft

Thrust shaft

Tunnel shafts

Screw shaft

13-12-21 Propeller 31-12-21

Stern tube { 9-12-21
31-12-21

Steam pipes tested

Engine and boiler seatings 13-12-21

Engines holding down bolts

Completion of pumping arrangements

Boilers fixed

Engines tried under steam

Completion of fitting sea connections

Stern tube

Screw shaft and propeller

Main boiler safety valves adjusted

Thickness of adjusting washers

Material of Crank shaft

Identification Mark on Do.

Material of Thrust shaft

Identification Mark on Do.

Material of Tunnel shafts

Identification Marks on Do.

Material of Screw shafts

Identification Marks on Do.

Material of Steam Pipes

Test pressure

Is an installation fitted for burning oil fuel

Yes.

Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case

If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The underwater sea connection, stern tube, tail shaft & propeller satisfactorily fitted
The discharge valves remain to be fitted at Glasgow.
The vessel has left for Glasgow in tow, where the machinery is to be installed and the Glasgow Surveyors have been advised.

The amount of Entry Fee ... £

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for,

19

When received,

19

Committee's Minute

GLASGOW 21 FEB 1922

Assigned

See Gls. Rpt. No. 41745.

A. B. Forster. W. T. Pyle
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 24 FEB. 1922

See Minute on
Dub. Rpt 4176

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