

REPORT ON MACHINERY.

BEL. 9380
No. 44760

Date of writing Report 9-6-1925 When handed in at Local Office 10 Port of Glasgow Received at London Office 17 JUN 1925

No. in Survey held at Glasgow Reg. Book. on the New Steel Y.S. Schuerruba Date, First Survey 18.9.24 Last Survey 6-6-1925 (Number of Visits 16)

Master Built at Belfast By whom built Harland & Wolff (N^o 702) Tons } Gross } Net } When built 1925

Engines made at Glasgow By whom made A. & J. Inglis Ltd (N^o 702) when made 1925
Boilers made at Belfast By whom made Harland & Wolff Ltd when made 1925

Registered Horse Power Owners Lago Shipping Co Ltd Port belonging to London
Nom. Horse Power as per Section 28 196 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Twin Triple Expansion No. of Cylinders 6 No. of Cranks 6

Dia. of Cylinders Twin 13 1/2 - 23 1/2 - 36 Length of Stroke 27 Revs. per minute Dia. of Screw shaft as per rule as fitted Material of screw shaft

Is 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 in the propeller boss If the liner is in more than one length are the joints burned 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 liners are fitted, is the shaft lapped or protected between the liners Length of stern bush

Dia. of Tunnel shaft as per rule as fitted 6.85 Dia. of Crank shaft journals as per rule as fitted 7.2 Dia. of Crank pin 7 3/8 Size of Crank webs 4 1/2 x 14 1/2 Dia. of thrust shaft under collars Dia. of screw Pitch of Screw No. of Blades State whether moveable Total surface

No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 13 1/2 Can one be overhauled while the other is at work yes
No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 13 1/2 Can one be overhauled while the other is at work yes

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In 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

Is 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 3700 sq ft Is Forced Draft fitted No No. and Description of Boilers
Working Pressure 180 Tested by hydraulic pressure to Date of test No. of Certificate

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

Thickness 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

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell plate

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint bottom 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

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space: Material Thickness Pitch of stays How are stays secured 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

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

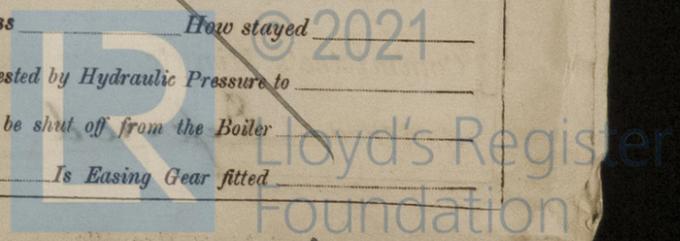
Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

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

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 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

Pressure to which each is adjusted Is Easing Gear fitted



IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded? —

SPARE GEAR. State the articles supplied:— Two connecting rod top end bolts and nuts, two connecting rod bottom end bolts and nuts, two main bearing bolts, one set of feed and bridge pump valves, air pump bucket, rod and valves, circulating pump bucket rod and valves, two eccentric straps, one set of packing rings for each HP & MP cylinder, one set of packing ring for each IP piston valve.

The foregoing is a correct description,

A. & J. INGLIS LIMITED

Peter Walker, *Sub. Eng.* Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1924 Sept 18. 1925 Feb 17. Mar 2. 5. 24. 7. 15. May 1. 8. 11. 14. 18. 19. 21. June 1. 2. 6
{ During erection on board vessel --- }
Total No. of visits 16

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 11-5-25 Slides 21-5-25 Covers 14-5-25 Pistons 1-6-25 Rods 1-6-25

Connecting rods 18-5-25 Crank shaft 14-5-25 Thrust shaft — Tunnel shafts — Screw shaft — Propeller —

Stern tube — Steam pipes tested — Engine and boiler seatings — 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 Steel Identification Mark on Do. LLOYD'S NS702 Material of Thrust shaft — Identification Mark on Do. —

Material of Tunnel shafts — Identification Marks on Do. L.C.O. 14-5-25 Material of Screw shafts — Identification Marks on Do. —

Material of Steam Pipes — Test pressure —

Is an installation fitted for burning oil fuel — 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 yes If so, state name of vessel ? Bel S/S N 701. (36 RPT 44666)

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

The workmanship and materials are good. The engines have been constructed under special survey in accordance with the Rules. They have been sent to Belfast to be fitted in the vessel. This machinery is satisfactorily fitted in the vessel see Belfast report.

32-9-01 28
The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 3 : :
Special els fee ... £ 19 : 12 : :
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : :
When applied for, 16-6-1925
When received, 21-6-1925

S. Davis, William Dutton
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 16 JUN 1925
Assigned Deferred.

TUES. 21 JUL 1925

