

REPORT ON MACHINERY.

No. 35717
29 DEC 1924

Received at London Office

Date of writing Report *Dec 17th 1924* When handed in at Local Office1924 Port of *HULL.*No. in Survey held at *Hull & Goole.*
Reg. Book.Date, First Survey *Jan. 18/24* Last Survey *Dec 13th 1924*(Number of Visits *36*)Gross *486*
Tons Net *195*on the *Shel S.S. SOUTHWELL*Master Built at *Goole.* By whom built *Goole S.B. & R. Co Ld* When built *1924*Engines made at *Hull* By whom made *C. & S. Holmes & Co Ld (1264)* when made *1924*Boilers made at *Hull.* By whom made *C. & S. Holmes & Co Ld* when made *1924*Registered Horse Power Owners *Trickin & Son Shipping Co. Ltd, Port belonging to* *Cardiff.*Nom. Horse Power as per Section 28 *82.* Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *no*

ENGINES, &c.—Description of Engines

*Triple Expansion*No. of Cylinders *3*No. of Cranks *3*Dia. of Cylinders *13. 21. 35* Length of Stroke *24* Revs. per minute *105* Dia. of Screw shaft *7.4* as per rule *7.4* as fitted *7.2* Material of *Steel* screw shaftIs the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made water tight in the propeller boss *Yes* If the liner is in more than one length are the joints burned *Yes* 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 *Yes* If two liners are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *36"*Dia. of Tunnel shaft as per rule *6.49* as fitted *6.49* Dia. of Crank shaft journals as per rule *6.8* as fitted *6.4* Dia. of Crank pin *6.8* Size of Crank webs *13.5 x 4.75* Dia. of thrust shaft under collars *6.8* Dia. of screw *9.3* Pitch of Screw *10.5 - 6* No. of Blades *4* State whether moveable *no* Total surface *31 sq. ft.*No. of Feed pumps *Two* Diameter of ditto *2 3/8* Stroke *14 1/4* Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *Two* Diameter of ditto *2 3/8* Stroke *14 1/4* Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *Two* Sizes of Pumps *6 x 4 x 6 and 6 x 6 x 6* No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room *1 @ 2 1/2* In Hold, &c. *F.P.T. 1 @ 3 1/2* *Hold 2 @ 2 1/2*A.P.T. *1 @ 3 1/2* No. of Bilge Injections *one* sizes *3"* Connected to condenser, or to circulating pump *CP.* Is a separate Donkey Suction fitted in Engine room & size *Yes 2 1/2"*Are all the bilge suction pipes fitted with roses *Yes* Are the roses in Engine room always accessible *Yes* Are the sluices on Engine room bulkheads always accessible *Yes*Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Both*Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates *Yes* Are the Discharge Pipes above or below the deep water line *Above*Are they each fitted with a Discharge Valve always accessible on the plating of the vessel *Yes* Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes*What pipes are carried through the bunkers *Forward Suctions* How are they protected *Wood casings.*Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*Is the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Yes*

BOILERS, &c.—(Letter for record)

Manufacturers of Steel *Port J. & S. Steel Co. Ltd. Bladville Row Ld.*Total Heating Surface of Boilers *1500* Is Forced Draft fitted *no* No. and Description of Boilers *1 Single ended.*Working Pressure *180 lbs* Tested by hydraulic pressure to *320 lbs* Date of test *20.8.24* No. of Certificate *3530*Can each boiler be worked separately *Yes* Area of fire grate in each boiler *45.9 sq. ft.* No. and Description of Safety Valves to each boiler *2 Spring loaded* Area of each valve *4.9 sq. ft.* Pressure to which they are adjusted *180 lbs* Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *18"* dia. of boilers *13'-0"* Length *10'-3"* Material of shell plates *Steel*Thickness *13/32* Range of tensile strength *28/32* Are the shell plates welded or flanged *Yes* Descrip. of riveting: cir. seams *BR.*long. seams *TR. 5/16* Diameter of rivet holes in long. seams *13/32* Pitch of rivets *4 7/16* Lap of plates or width of butt straps *16"*Per centages of strength of longitudinal joint *88.9* Working pressure of shell by rules *190* Size of manhole in shell *16 x 12"*Size of compensating ring *13/32 x 7 1/2* No. and Description of Furnaces in each boiler *3, Plain* Material *Steel* Outside diameter *38.25*Length of plain part *80.25* Thickness of plates *3/4* Description of longitudinal joint *Welded* No. of strengthening rings *Yes*Working pressure of furnace by the rules *192* Combustion chamber plates: Material *Steel* Thickness: Sides *11/16* Back *2 1/32* Top *11/16* Bottom *11/16*Pitch of stays to ditto: Sides *6 x 9* Back *7 1/4 x 8 1/4* Top *10 x 8 1/4* If stays are fitted with nuts or riveted heads *Yes* Working pressure by rules *183*Material of stays *Steel* Area at smallest part *1.76* Area supported by each stay *90* Working pressure by rules *193* End plates in steam space:Material *Steel* Thickness *1"* Pitch of stays *17 x 17* How are stays secured *SW. & W.* Working pressure by rules *181* Material of stays *Steel*Area at smallest part *5.27* Area supported by each stay *289* Working pressure by rules *190* Material of Front plates at bottom *13/16*Thickness *Steel* Material of Lower back plate *Steel* Thickness *25/32* Greatest pitch of stays *13 1/2 x 8 1/8* Working pressure of plate by rules *194*Diameter of tubes *3 1/2* Pitch of tubes *4 3/4* Material of tube plates *Steel* Thickness: Front *13/16* Back *13/16* Mean pitch of stays *10.7*Pitch across wide water spaces *13 1/2* Working pressures by rules *204 + 150* Girders to Chamber tops: Material *Steel* Depth andthickness of girder at centre *7 1/2 x 13 1/4* Length as per rule *2'-8"* Distance apart *8 3/4* Number and pitch of stays in each *2 @ 10"*Working pressure by rules *189* Steam dome: description of joint to shell *Yes* % of strength of joint *Yes*Diameter *Yes* Thickness of shell plates *Yes* Material *Yes* Description of longitudinal joint *Yes* Diam. of rivet holes *Yes*Pitch of rivets *Yes* Working pressure of shell by rules *Yes* Crown plates *Yes* Thickness *Yes* How stayed *Yes*SUPERHEATER. Type *Yes* Date of Approval of Plan *Yes* Tested by Hydraulic Pressure to *Yes*Date of Test *Yes* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes*Diameter of Safety Valve *Yes* Pressure to which each is adjusted *Yes* Is Easing Gear fitted *Yes*

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

2m.1.19. T

2200 51200 101000

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IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—Two top end bolts & nuts. 2 Bottom end bolts & nuts. 2 main bearing bolts & nuts. Set of coupling bolts & nuts. Spare valves for air, circulating, fuel & bilge pumps. main and donkey check valves.

The foregoing is a correct description,

For CHARLES B. HOLMES & CO. LTD

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1924: Jan 18. Feb 13 Apr 4. 15. 16. 30, May 2. 13. 23, Jun 6. 10. 13. 20. 30.
During erection on board vessel --- Jul 9. 18. 28, Aug 11. 18. 20. 24 Sep 2. 23. Oct 7. 13. 24. 30, 27. 30, Nov 5. 10. 17. 18. 20
Total No. of visits 36
Is the approved plan of main boiler forwarded herewith ☒ Yes

Dates of Examination of principal parts—Cylinders 10.6.24 Slides 24.10.24 Covers 10.6.24 Pistons 24.10.24 Rods 18.7.24
Connecting rods 18.7.24 Crank shaft 23.9.24 Thrust shaft 23.9.24 Tunnel shafts — Screw shaft 7.10.24 Propeller 7.10.24
Stern tube 7.10.24 Steam pipes tested 10.11.24 Engine and boiler seatings 30.10.24 Engines holding down bolts 5.11.24
Completion of pumping arrangements 25.11.24 Boilers fixed 30.10.24 Engines tried under steam 20.11.24
Completion of fitting sea connections 13.10.24 Stern tube 13.10.24 Screw shaft and propeller 13.10.24
Main boiler safety valves adjusted 20.11.24 Thickness of adjusting washers A 7/16 F 3/8
Material of Crank shaft Steel Identification Mark on Do. 127 J.H.M. Material of Thrust shaft Steel Identification Mark on Do. 127 J.H.M.
Material of Tunnel shafts — Identification Marks on Do. — Material of Screw shafts Steel. Identification Marks on Do. 127 J.H.M.
Material of Steam Pipes S.D. Copper, 3 1/2 in. x 6 lbs. Test pressure 360 lbs per sq. in.
Is an installation fitted for burning oil fuel ☒ No 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 engines & boilers of this vessel have been built under special survey & in accordance with the approved plans of the Society's Rules. They have been satisfactorily fitted on board, tried under working conditions & found good. Safety valves adjusted & pumping arrangements in order. The machinery is eligible in my opinion to have record in the Register Book of L.M.C. 12.24. C.L.

It is submitted that this vessel is eligible for THE RECORD. + LMC 12.24. CL.

The amount of Entry Fee ... £ 2 : 0 :
Special ... £ 20 : 10 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 19...
When received, 25

Committee's Minute

TUES. 6 JAN 1925

Assigned

+ L.M.C. 12.24
C.L.

CERTIFICATE WRITTEN.



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