

REPORT ON MACHINERY

Received at London Office

JUN 10 1924

Date of writing Report 19 When handed in at Local Office - 6 JUN 1924 in Port of Sunderland
 No. in Survey held at Sunderland Date, First Survey 2nd Apr Last Survey 1st June 1924
 Reg. Book. on the new steel S/S "TAUNTON" (Number of Visits 17)

Master Built at Stockton By whom built Wm Taylor & Co Ltd (S/N 214) When built 1924
 Engines made at Sunderland By whom made N.E. Marine Eng Co Ltd (N 2585) when made 1924
 Boilers made at Sunderland By whom made N.E. Marine Eng Co Ltd (N 2585) when made 1924
 Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 163 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 17 1/2" 29" 48" Length of Stroke 33" Revs. per minute 84 Dia. of Screw shaft 10 1/2" Material of steel
 as fitted 10 3/8" screw shaft
 Is 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 - ~~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 3'-5 1/2"
 Dia. of Tunnel shaft as per rule 8.78" 8.85" Dia. of Crank shaft journals as per rule 9.22" 9.29" Dia. of Crank pin 9 3/8" Size of Crank webs 14 x 5 1/16" Dia. of thrust shaft under
 collars 9 3/8" Dia. of screw 13'-0" Pitch of Screw 12'-9" No. of Blades 4 State whether moveable no Total surface 52 sq ft
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 16 1/2" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 3" Stroke 16 1/2" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 2 Sizes of Pumps 7 1/2 x 9" 5 1/2 x 3 1/2 x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 3 @ 3" In Holds, &c. 1st hold - 2 @ 3" After hold - 3 @ 3"
 Tunnel well 1 m @ 3"
 No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump 6 P. Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2"
 mud boxes & draught bilge (Bilge injection)
 Are all the bilge suction pipes fitted with yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none
 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 hold suction How are they protected under wood casing
 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
 Dates of examination of completion of fitting of Sea Connections 16.5.24 of Stern Tube 24.5.24 Screw shaft and Propeller 27.5.24
 Is the Screw Shaft Tunnel watertight see hull Rpt Is it fitted with a watertight door yes worked from Top platform

BOILERS, &c.—(Letter for record (S)) Manufacturers of Steel David Bullie & Co Ltd (plates) John Spencer & Co Ltd (stay)
 Total Heating Surface of Boilers 27920 sq ft Is Forced Draft fitted no No. and Description of Boilers 2 single ended marine
 Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 6-5-24 No. of Certificate 3877
 Can each boiler be worked separately yes Area of fire grate in each boiler 350 sq ft No. and Description of Safety Valves to
 each boiler 2 direct spring Area of each valve 490" Pressure to which they are adjusted 185 Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 1'-8" Mean dia. of boilers 12'-3 1/16" Length 10'-6" Material of shell plates steel
 Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams DR
 long. seams DRS-TR Diameter of rivet holes in long. seams 1 3/32" Pitch of rivets 7 1/16" Lap of plates or width of butt straps 1'-4 5/8"
 Per centages of strength of longitudinal joint rivets 91 plate 86 Working pressure of shell by rules 180 Size of manhole in shell 16 x 12
 Size of compensating ring flanged No. and Description of Furnaces in each boiler 2 Deighton Material steel Outside diameter 3'-4 1/4"
 Length of plain part top 33" bottom 32" Thickness of plates crown 3/16" bottom 3/16" Description of longitudinal joint welded No. of strengthening rings 1
 Working pressure of furnace by the rules 184 Combustion chamber plates: Material steel Thickness: Sides 13/16" Back 3/32" Top 13/16" Bottom 13/16"
 Pitch of stays to ditto: Sides 12 1/8" x 9 3/4" Back 11 1/8" x 10 1/2" Top 12 1/8" x 9 3/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 185
 Material of stays steel Diameter at smallest part 2.360" Area supported by each stay 117.80 Working pressure by rules 180 End plates in steam space:
 Material steel Thickness 1 1/32" Pitch of stays 25" x 18 1/2" How are stays secured DR & W Working pressure by rules 180 Material of stays steel
 Diameter at smallest part 7.670" Area supported by each stay 462.50 Working pressure by rules 184 Material of Front plates at bottom steel
 Thickness 7/8" Material of Lower back plate steel Thickness 7/8" Greatest pitch of stays 14 1/2" x 11 1/4" Working pressure of plate by rules 187
 Diameter of tubes 3 1/4" Pitch of tubes 4 3/4" x 4 1/2" Material of tube plates steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 10 1/2"
 Pitch across wide water spaces 14 1/2" (2 1/2" BP) Working pressures by rules 182 Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 2 @ 8 1/2" x 15" Length as per rule 2-7 1/2" Distance apart 12 1/8" Number and pitch of stays in each 2 @ 9 3/4"
 Working pressure by rules 182 Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
 separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - Two connecting rod top and bottom end bolts and nuts
two main bearing bolts, one set of coupling bolts, one set of feed and bilge pump
valves, nuts and bolts of various sizes, one propeller.

The foregoing is a correct description,

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

C. T. Adams
Manager.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 19 21. Apr. 29. 18. 24. 29. May, 6. 21. 20. 22. 24. 26. 27. 30. June 2. 3. 14

{ During erection on board vessel - - - }

Total No. of visits 17

Is the approved plan of main boiler forwarded herewith yes

MoB. visits - 1924 May 16 June 12. 16. 25 July 14. = 5

" " " donkey " " "

Dates of Examination of principal parts - Cylinders 6-5-24 Slides 22-5-24 Covers 6-5-24 Pistons 22-5-24 Rods 20-5-24
Connecting rods 20-5-24 Crank shaft 8-5-24 Thrust shaft 20-5-24 Tunnel shafts 20-5-24 Screw shaft 20-5-24 Propeller 22-5-24
Stern tube 20-5-24 Steam pipes tested 30-5-24 Engine and boiler seatings 16-5-24 Engines holding down bolts 3-6-24
Completion of pumping arrangements 4-6-24 Boilers fixed 2-6-24 Engines tried under steam 4-6-24

Main boiler safety valves adjusted 4-6-24 Thickness of adjusting washers For boiler - bolt 5/16". Steam boiler - F 3/16", A 3/8"

Material of Crank shaft I. steel Identification Mark on Do. LLOYD'S No 64 Material of Thrust shaft I. steel Identification Mark on Do. LLOYD'S No 64

Material of Tunnel shafts I. steel Identification Marks on Do. L.C.O. 20-5-24 Material of Screw shafts I. steel Identification Marks on Do. L.C.O. 20-5-24

Material of Steam Pipes Copper Test pressure 400 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 yes If so, state name of vessel "Passington" S.R.P. No 28812

General Remarks (State quality of workmanship, opinions as to class, &c.)
The materials and workmanship are good.
The machinery has been constructed under special survey and is eligible in our opinion for classification and the Record + LMC - 7. 24

Note: - The report on the Electric Light will be forwarded in due course

It is submitted that this vessel is eligible for THE RECORD.
+ LMC 7.24. C.L.
Ans. 15/7/24

The amount of Entry Fee ... £ 3 : :
Special ... £ 40 : 15 : :
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : :
When applied for, 5 JUN 1924
When received, 19 24

C. T. Adams & W. Morrison
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRI 18 JUL 1924
Assigned + dml. 7. 24 C.L.



SUNDERLAND.

Certificate (if required) to be sent to.

The Surveyors are requested not to write on or below the space for Committee's Minute.

Form No. 1A.