

REPORT ON MACHINERY.

No. 6239

Port of MIDDLESBROUGH-ON-TEES

Received at London Office MAY 5 1910

No. in Survey held at Stockton-on-Tees Date, first Survey 22nd Nov. Last Survey 25th April 1910
 Reg. Book OS 100 upon the Steel Screw Steamer "Spilsby" (S.S. No 451) Tons { Gross 3661.07
 Master A. H. Goldsworthy Built at Stockton By whom built Messrs Roper & Sons Ltd. When built 1910
 Engines made at Stockton By whom made Messrs Blair & Co Lim (N° 1665) when made 1910
 Boilers made at Stockton By whom made Messrs Blair & Co Lim when made 1910
 Registered Horse Power 323 Owners Messrs Roper & Co. Port belonging to Stockton.
 Nom. Horse Power as per Section 28 323 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 25"-41"-67" Length of Stroke 45 Revs. per minute 56 Dia. of Screw shaft as per rule 13.9 Material of screw shaft iron
 as fitted 15

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 one length 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 5'-3"

Dia. of Tunnel shaft as per rule 12.4 Dia. of Crank shaft journals as per rule 13.02 Dia. of Crank pin 14 Size of Crank webs 27x9 Dia. of thrust shaft under

collars 14 Dia. of screw 17'-0" Pitch of Screw 17'-0" No. of Blades 4 State whether moveable no Total surface 90 sq ft

No. of Feed pumps 2 Diameter of ditto 3 1/4 Stroke 33 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 3/4 Stroke 33 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps Ballast 9x10 Ind 4x8 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2 @ 3" + one @ 3 1/2" In Holds, &c. 2 @ 2 3/4" in each hold

Tunnel with one at 2 1/2"

No. of Bilge Injections 1 sizes 6 1/4 Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes-4"

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 for hold How are they protected wood ceiling

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 1.4.10 of Stern Tube 21.3.10 Screw shaft and Propeller 14.4.10

Is the Screw Shaft Tunnel watertight see hull Rpt. Is it fitted with a watertight door yes worked from top platform

OILERS, &c.—(Letter for record (5)) Manufacturers of Steel Messrs J. Spencer & Sons

Total Heating Surface of Boilers 4927 Is Forced Draft fitted no No. and Description of Boilers 2 Single Ended

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 24.3.10 No. of Certificate 4397

Can each boiler be worked separately yes Area of fire grate in each boiler 66 sq ft No. and Description of Safety Valves to

each boiler 2 direct spring Area of each valve 8.29 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear yes

Smallest distance between boilers or plates and bunkers or woodwork 2'-0" dia. of boilers 16'-0" Length 10'-6" Material of shell plates steel

Thickness 1 3/32 Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 2 Riv lap

long. seams 2 Riv 3 Riv Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 9 1/2 Lap of plates or width of butt straps 19 3/8 x 1 1/4

Per centages of strength of longitudinal joint 87.1 Working pressure of shell by rules 184 Size of manhole in shell 16" x 12"

Size of compensating ring 7 1/2 x 1 3/32 No. and Description of Furnaces in each boiler 3 Corrugated Material steel Outside diameter 48"

Length of plain part top Thickness of plates bottom 37 Description of longitudinal joint welded No. of strengthening rings —

Working pressure of furnace by the rules 189 Combustion chamber plates: Material steel Thickness: Sides 1 1/2 Back 1 1/2 Top 1 1/2 Bottom 1 3/4

Pitch of stays to ditto: Sides 9 1/2 x 9 1/2 Back 8 1/2 x 9 1/2 Top 9 1/2 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 181

Material of stays steel Diameter at smallest part 1.59 Area supported by each stay 30.25 Working pressure by rules 198 End plates in steam space:

Material steel Thickness 1 1/2 Pitch of stays 20 1/2 x 21 1/2 How are stays secured nuts Working pressure by rules 183 Material of stays steel

Diameter at smallest part 3.29 Area supported by each stay 446.25 Working pressure by rules 198 Material of Front plates at bottom steel

Thickness 1" Material of Lower back plate steel Thickness 1" Greatest pitch of stays 14 1/2 x 9 1/2 Working pressure of plate by rules 230

Diameter of tubes 3 1/2 Pitch of tubes 4 3/4 x 4 3/8 Material of tube plates steel Thickness: Front 1 1/2 Back 1 3/8 Mean pitch of stays 10 1/2"

Pitch across wide water spaces 14 1/2" Working pressures by rules 181 Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 7 1/2 x 1 1/2 Length as per rule 27 1/2 Distance apart 9 3/4" Number and pitch of stays in each 2 @ 9"

Working pressure by rules 183 Superheater or Steam chest; how connected to boiler none 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 —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

~~VERTICAL~~ DONKEY BOILER— ~~Manufacturers of Steel~~ See also Indt Report No 6064

No. one Description Multitubular Single ended
 Made at Stockton By whom made J. Sudron & Co (No 2593) When made 1910 Where fixed Upper 1st in Bdg
 Working pressure 100 tested by hydraulic pressure to 200 Date of test 20.12.09 No. of Certificate 4346 Fire grate area 30½ Description of Sc
 Valves direct spring No. of Safety Valves 2 Area of each 7.07 Pressure to which they are adjusted 105 Date of adjustment 22.4
 If fitted with easing gear yes If steam from main boilers can enter the donkey boiler no Dia. of donkey boiler 10'6" Length 10'0"
 Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____
 Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____
 Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____
 Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____
 Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____
 Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— Two each of Top end, bottom end & main bearing bolts and nuts; one set of coupling bolts & nuts; one set feed & bilge pump valves; HP & piston rings, assorted bolts & nuts, iron of various sizes and one tail shaft

The foregoing is a correct description,
FOR BLAIR & CO., LIMITED

Manufacturer.

Dates of Survey while building
 During progress of work in shops - - - - - SECRETARY. 1909. 10.04.22.25.29. Dec. 2. 9.15.17.20.22. 1910. Jan. 4. 6.14.18.20.24.26.28.31. & by 1.0
 During erection on board vessel - - - - - 4.7.8.10.11.14.16.18.21.22.25.28. Mar. 2. 4.7.9.11.14.15.16.18.21.22.24. Apr. 1. 4. 6.11.14.15.18.21.22.25.
 Total No. of visits 55 Is the approved plan of main boiler forwarded herewith yes

Dates of Examination of principal parts—Cylinders 10'3" 2.10 Slides 10'2.10 Covers 25'2.10 Pistons 25'2.10 Rods 25'2.10
 Connecting rods 9'3.10 Crank shaft 4'3.10 Thrust shaft 4'2.10 Tunnel shafts 4'7.3.10 Screw shaft 6'4.10 Propeller 4'4.10
 Stern tube 16'3.10 Steam pipes tested 15'4.10 Engine and boiler seatings 1'4.10 Engines holding down bolts 14'4.10
 Completion of pumping arrangements 21'4.10 Boilers fixed 21'4.10 Engines tried under steam 21'4.10
 Main boiler safety valves adjusted 21'4.10 Thickness of adjusting washers PV = 5/16, SV = 5/32 Port Boiler Star Boiler
 Material of Crank shaft Ing Steel Identification Mark on Do. 6550 Material of Thrust shaft Ing Steel Identification Mark on Do. 7018
 Material of Tunnel shafts Ing Steel Identification Marks on Do. 7018.N Material of Screw shafts iron Identification Marks on Do. 6550
 Material of Steam Pipes solid drawn copper (7 x 5/8 x 5 1/2 x 1/2) Test pressure 360 lbs.

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been built under Special Survey. The materials and workmanship are sound and good. The boiler and main steam pipes were tested by hydraulic pressure, and the engines and boilers were examined under steam at a wharf and all found satisfactory

The machinery is now in a good and safe working condition and eligible in my opinion to have the notation of LMC-4.10 in the Register Book

It is submitted that
 this vessel is eligible for
THE RECORD. + LMC 4.10.

N.H.P. = 323
 The amount of Entry Fee. . . £ 30-0-0 When applied for, 21.4.10
 Special . . . £ 36-3-0 When received, 30.4.10
 Donkey Boiler Fee . . . £ —
 Travelling Expenses (if any) £ —

Committee's Minute

Assigned

FRI. 6 MAY 1910

+ L.M.C. 4.10

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping



© 2020

Lloyd's Register
 Foundation

MACHINERY CERTIFICATE
 WRITTEN.