

REPORT ON MACHINERY.

No. 10173.

Received at London Office TUE 30 JUL 1918

Date of writing Report

When handed in at Local Office

20/7/18 Port of Middlesbrough

No. in Survey held at Stockton-on-Tees
Reg. Book.

Date, First Survey 6th Dec^r 1917 Last Survey 15th July 1918

on the

Steel Screw Steamer WAR KESTREL

(S.S.N^o 199)

Tons { Gross 5214
Net 3186

Master Courtney Built at Stockton

By whom built Craig Taylor & Co

When built 1918

Engines made at Stockton

By whom made Messrs Blair & Co Lim^d (N^o 1886) when made 1918

Boilers made at Stockton

By whom made Messrs Blair & Co Lim^d when made 1918

Registered Horse Power

Owners The Shipping Controller Port belonging to London

Com. Horse Power as per Section 28 518 517

Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines

Tri-compound

No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 27-44-73 Length of Stroke 48 Revs. per minute 77 Dia. of Screw shaft 14.7 Material of Ing. Steel

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

the propeller boss yes If the liner is in more than one length are the joints burned in one 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 tight fit If two

liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5-1 1/4"

Dia. of Tunnel shaft 13.33 as per rule 13.5 Dia. of Crank shaft journals 14.0 as per rule 14.5 Dia. of Crank pin 14.5 Size of Crank webs 28x9 Dia. of thrust shaft under

collars 14 3/4" Dia. of screw 17-6" Pitch of Screw 16-6" No. of Blades 4 State whether moveable no Total surface 98.2 sq

No. of Feed pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work yes

No. of Donkey Engines 3 Sizes of Pumps 10 1/2, 14, 24 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 @ 3 1/2" In Holds, &c. 2 @ 3 1/2" each hold except aftermost when

one @ 3 1/2" Arranged to carry oil fuel in D.B. tanks, see note re joints of pipes yes

No. of Bilge Injections 1 sizes 13 Connected to condenser yes Is a separate Donkey Suction fitted in Engine room & size yes - 3 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 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 Suctions to forward holds 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 6.5.18 of Stern Tube 16.5.18 Screw shaft and Propeller 10.6.18

Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door no entered worked from upper deck by trunks

OILERS, &c.—(Letter for record (5)) Manufacturers of Steel James John Spence & Sons Lim^d

Total Heating Surface of Boilers 7668 Is Forced Draft fitted yes No. and Description of Boilers 3 single ended

Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 1.6.18 No. of Certificate 5902

Can each boiler be worked separately yes Area of fire grate in each boiler 63.3 sq No. and Description of Safety Valves to

each boiler 2 direct spring Area of each valve 9.62 sq Pressure to which they are adjusted 185 Are they fitted with easing gear yes

Smallest distance between boilers 7-0" and bunkers 7-0" Inside 15-6" Length 11-6" Material of shell plates steel

Thickness 1 1/4" Range of tensile strength 28-22 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 2-R-lap

long. seams 2-R-lap Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 9 1/8" Lap of plates 19 1/2 x 1 1/2 in

Per centages of strength of longitudinal joint 88.2 Working pressure of shell by rules 182 Size of manhole in 16 x 12

Size of compensating ring flanged No. and Description of Furnaces in each boiler 3 Dighton Material steel Outside diameter 50 3/4

Length of plain part 19 Thickness of plates 32 Description of longitudinal joint Weld No. of strengthening rings 23/32

Working pressure of furnace by the rules 188 Combustion chamber plates: Material steel Thickness: Sides 23/32 Back 1/4" Top 23/32 Bottom 23/32

Pitch of stays to ditto: Sides 10 5/8 x 9 1/4 Back 10 1/4 x 8 3/4 Top 10 5/8 x 9 1/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 180

Material of stays steel Diameter at smallest part 2.31 Area supported by each stay 98.5 Working pressure by rules 211 End plates in steam space

Material steel Thickness 1 1/2 Pitch of stays 2 1/2 How are stays secured nuts Working pressure by rules 191 Material of stays steel

Diameter at smallest part 8.29 Area supported by each stay 467 Working pressure by rules 185 Material of Front plates at bottom steel

Thickness 31/32 Material of Lower back plate steel Thickness 27/32 Greatest pitch of stays 13 5/8 x 8 3/4 Working pressure of plate by rules 187

Diameter of tubes 2 3/4 Pitch of tubes 4 x 3 3/8 Material of tube plates steel Thickness: Front 31/32 Back 3/4 Mean pitch of stays 9 1/2

Pitch across wide water spaces 13 5/8 Working pressures by rules 181 Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 10 x 1 3/4 Length as per rule 35 7/8 Distance apart 10 5/8 Number and pitch of stays in each 3 @ 9 1/4

Working pressure by rules 188 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

separately yes Diameter 10 Length 10 Thickness of shell plates 10 Material steel Description of longitudinal joint Weld Diam. of rivet

holes 10 Pitch of rivets 10 Working pressure of shell by rules 181 Diameter of flue 10 Material of flue plates steel Thickness 10

If stiffened with rings yes Distance between rings 10 Working pressure by rules 181 End plates: Thickness 10 How stayed yes

Working pressure of end plates 181 Area of safety valves to superheater 10 Are they fitted with easing gear yes

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded? ✓

IS A DONKEY BOILER FITTED? *No*
SPARE GEAR. State the articles supplied: - *Two each of connecting rod top end, bottom end and main bearing bolts and nuts: 3 crank shaft & 3 tunnel shaft coupling bolts & nuts: one set each of feed and bilge pump valves: 3 each main and donkey feed check valves: assorted bolts & nuts, iron of various sizes, one cast-iron propeller and minor gear as per specification*

The foregoing is a correct description,

FOR BLAIR & CO., LIMITED.

No. 11

Manufacturer.

Dates of Survey while building	During progress of work in shops - - - During erection on board vessel - - - Total No. of visits - - -	1917 Dec 6. 7. 27. 1918 Jan 11. 21. 28. 28. 30. Feb 18. 22. 25. 27. Mar 2. 7. 8. 11. 13. 14. 16. 20. 22. 25. 26. 28. Apr 2. 4. 5. 8. 10. 11. 12. 15. 17. 19. 23. 24. 26. 29. 30. May 3. 6. 8. 9. 11. 13. 15. 16. 17. 22. 24. 27. 29. 30. June 1. 4. 6. 10. 12. 17. 19. 21. 22. 25. 26. July 1. 4. 8. 9. 10. 12. 15.	Is the approved plan of main boiler forwarded herewith <input checked="" type="checkbox"/> yes Return for duplicate <input checked="" type="checkbox"/> Boiler
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Is the approved plan of main boiler forwarded herewith

Return for duplicate Boiler

Dates of Examination of principal parts—Cylinders 20.3.18 Slides 20.3.18 Covers 20.3.18 Pistons 20.3.18 Rods 4.4.18
28.3.18 to 12.4.18 Tunnel shafts 22.3.18 Screw shaft 22.5.18 Propeller 22.5.18

Connecting rods 8.4.18 Crank shaft 28.3.18 Thrust shaft 22.3.18 Tunnel shafts 12.4.18 Screw shafts 12.4.18
 Boiler settings 16.5.18 Engines holding down bolts 17.6.18

Stern tube 29.4.18 Steam pipes tested 6.10.17 Engine and boiler sealings 12.10.17
Boilers fixed 4.7.18 Engines tried under steam 4.7.18
P-3/4 P-1/2 P-5/2

Completion of pumping arrangements 10.7.18 Thickness of adjusting washers P.Bla 1 100 C.Bla 5 1/2 S.Ha 5 1/2 B 5 1/2 B

Material of Crank shaft Ing Steel Identification Mark on Do. 7135 Material of Thrust shaft Ing Steel Identification Mark on Do. 7135

Material of Tunnel shafts Ing Steel Identification Marks on Do. 3037-N Material of Screw shafts 217
 Test pressure 540 lbs.

Material of Steam Pipes Lap welded steel
 Fuel 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 ☒ "Don Vulture" Rpt # 10132

Is this machinery duplicate of a previous case yes If so, state name of vessel and number the machinery of this vessel has been

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of*
the mill is sound and good and in

built under special survey. The materials and workmanship are excellent and the working conditions and framed

completion the engines and boilers were examined under full steam and found to be in accordance with the amended specification.

satisfactory. The work has been completed in ~~the~~ ^{outside of} machinery space bottom tank pipes, which may be used for the panel.

with the exception that the joints of the dome were fitted between unmachined flanges instead of

of oil, are made with double ply asbestos, with lining of

of machined flange and $\frac{1}{8}$ carbide.

to have the notations of \times LMC-7.18 and "carrying fuel oil F.P. above 150

my opinion to have been in the
"G. B." in the Register Book

on the 21st 1881

(Contd.)

Note: - The vessel is fitted with Electric Light and wireless.

it is such
this vessel is eligible for
RECORD + LMC 7.18. F.D. 91

41.87

When applied for.

The amount of Entry Fee ... £
Special ... £ 116-17-4 22nd / 1918
Wm Morrison
Registrar of British & Foreign Ships

Donkey Boiler Fee £ 31.7.45

Travelling Expenses (if any) £

Committee's Minute

Assigned 7-18



Esays 3
Esued


