

REPORT ON MACHINERY

No. 17683
WED. AUG. 17 1920

Received at London Office

When handed in at Local Office *Aug 3rd 1920* Port of *Greenock*
Greenock & Port Glasgow Date, First Survey *Nov 29th 1917* Last Survey *Aug 2nd 1920*
(Number of Visits *97*)

"**BOGSTAD**"

Built at *Port Glasgow* By whom built *Lithgows Ltd (N^o 724)* Tons { Gross *4624*
Net *2897*
When built *1920*

By whom made *Rankin & Blackmore Ltd (N^o 362)* when made *1920*

By whom made *Rankin & Blackmore Ltd (N^o 362)* when made *1920*

Owners *Dampskibsselskabet Akt.* Port belonging to *Christiania*

Is Refrigerating Machinery fitted for cargo purposes *ho.* Is Electric Light fitted *Yes.*

Description of Engines *Triple Expansion* No. of Cylinders *3* No. of Cranks *3*

45"-74" Length of Stroke *51"* Revs. per minute *75* Dia. of Screw shaft *as per rule 15.03* Material of *S.*
as fitted 15.2 screw shaft

Is the after end of the liner made water tight *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

in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes.* If two

shaft lapped or protected between the liners *Yes.* Length of stern bush *63"*

Dia. of Crank shaft journals *as per rule 14.35* Dia. of Crank pin *14.2"* Size of Crank webs *27.4 x 9.2"* Dia. of thrust shaft under

of screw *18.3"* Pitch of Screw *18.0"* No. of Blades *4* State whether moveable *ho.* Total surface *110 sqft.*

Diameter of ditto *4.2"* Stroke *28"* Can one be overhauled while the other is at work *Yes.*

Diameter of ditto *4.2"* Stroke *28"* Can one be overhauled while the other is at work *Yes.*

Sizes of Pumps *12 x 9 x 12 - 8 x 6 x 8 - 6 x 4 x 6* No. and size of Suctions connected to both Bilge and Donkey pumps

3.5" Tunnel *1 - 2.5"* In Holds, &c. *Ford holds 4 - 3.5"*

Connected to condenser, or to circulating pump *C.P.* Is a separate Donkey Suction fitted in Engine room & size *Yes - 3.5"*

Are the roses in Engine room always accessible *Yes.* Are the sluices on Engine room bulkheads always accessible *Yes.*

Are they Valves or Cocks *Both.*

Are the Discharge Pipes above or below the deep water line *Above.*

Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes.*

How are they protected *Yes.*

Are the Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes.*

Are the Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes.*

Tunnel watertight *Yes.* Is it fitted with a watertight door *Yes.* worked from *Top Platform Eng Room.*

Manufacturers of Steel *W. Rankin & Co. Stewarts & Lloyd & Lanarkshire Steel Co.*

Is Forced Draft fitted *Yes.* No. and Description of Boilers *Three Cyl. Multi Single End.*

Tested by hydraulic pressure to *360 lbs.* Date of test *10-5-20* No. of Certificate *1454.*

Area of fire grate in each boiler *62 sqft.* No. and Description of Safety Valves to

Pressure to which they are adjusted *185 lbs.* Are they fitted with easing gear *Yes.*

Mean dia. of boilers *15.6"* Length *11.6"* Material of shell plates *S.*

Range of tensile strength *28632 Tons* Are the shell plates welded or flanged *ho.* Descrip. of riveting: cir. seams *LAP D.R.*

Diameter of rivet holes in long. seams *1.5 1/16"* Pitch of rivets *9/8"* Lap of plates or width of butt straps *18 1/2"*

Working pressure of shell by rules *183 lbs.* Size of manhole in shell *16" x 12"*

No. and Description of Furnaces in each boiler *3 Deighton* Material *S.* Outside diameter *48 1/2"*

Thickness of plates *9/16"* Description of longitudinal joint *Weld.* No. of strengthening rings *Yes.*

Combustion chamber plates: Material *S.* Thickness: Sides *4 1/4"* Back *3 3/4"* Top *4 1/4"* Bottom *3 1/4"*

Working pressure by rules *185 lbs.*

Area at smallest part *1.77 sqft.* Area supported by each stay *76.5 sqft.* Working pressure by rules *184 lbs.* End plates in steam space:

Thickness *1 1/32"* Pitch of stays *21" x 19"* How are stays secured *DN+W.* Working pressure by rules *183 lbs.* Material of stays *S.*

Area supported by each stay *399 sqft.* Working pressure by rules *196 lbs.* Material of Front plates at bottom *S.*

Thickens *2 1/32"* Greatest pitch of stays *12 1/2" x 8 1/4"* Working pressure of plate by rules *183 lbs.*

Pitch of tubes *4" x 3 7/8"* Material of tube plates *S.* Thickness: Front *1 3/16"* Back *1 1/4"* Mean pitch of stays *11 7/8" x 8"*

Working pressures by rules *220 lbs.* Girders to Chamber tops: Material *S.* Depth and

Length as per rule *34 1/4"* Distance apart *9 1/8"* Number and pitch of stays in each *3 @ 8 3/8"*

Steam dome: description of joint to shell *None.* % of strength of joint *Yes.*

Thickness of shell plates *Yes.* Material *Yes.* Description of longitudinal joint *Yes.* Diam. of rivet holes *Yes.*

Working pressure of shell by rules *Yes.* Crown plates *Yes.* Thickness *Yes.* How stayed *Yes.*

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes.*

Pressure to which each is adjusted *Yes.* Is Easing Gear fitted *Yes.*

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IS A DONKEY BOILER FITTED? *no.*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *Two top and bottom end bolts and nuts. Two main bearing bolts and nuts. 2 sets of coupling bolts and nuts. A set of Air Feed and Bilge pump valves. Set of piston rings. A quantity of assorted bolts and nuts and iron of various sizes. Propeller. Sail shaft. Full set of check valves. 6 Junk ring bolts. 25 Condenser 12 Boiler tubes.*

The foregoing is a correct description,

RANKIN & BLACKMORE, LTD.,

Manufacturers

H. Harris Director.
Dates of Survey while building { During progress of work in shops - - 1917. Nov. 29. 1919. Mar. 24. May. 9-14. June 12-20. 23-24. July 15-17. 23-25. 31. Aug. 6-14. 21-25. 27. Sept. 1-3. 12-15. 17-19. 20-22. 24-26. Oct. 1-3. 10-12. 18-20. 24-26. Dec. 1-3. 10-12. 18-20. 24-26. 1920 Jan. 12-14. 21-24. 28. Feb. 2-4. 9-13. 17. 19-23. 26. Mar. 2-4. 9-13. 17. 19-23. 26. Apr. 2-4. 9-13. 17. 19-23. 26. May. 2-4. 9-13. 17. 19-23. 26. June 2-4. 9-13. 17. 19-23. 26. July 2-4. 9-13. 17. 19-23. 26. Aug. 2-4. 9-13. 17. 19-23. 26. Sept. 2-4. 9-13. 17. 19-23. 26. Oct. 2-4. 9-13. 17. 19-23. 26. Nov. 2-4. 9-13. 17. 19-23. 26. Dec. 2-4. 9-13. 17. 19-23. 26.
During erection on board vessel - - - March 20-23-26-30-31. April 5-7-8-15-16-20-23-24-28. May 3-6-10-13-15-21-24-27-28. June 3-8-15-18-21-23-26-29. July 2-4-20. Aug. 1.
Total No. of visits *97*

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders *16-1-20*. Slides *16-3-20*. Covers *16-1-20*. Pistons *26-2-20*. Rods *23-6-20*

Connecting rods *18-11-19*. Crank shaft *15-12-19*. Thrust shaft *12-1-20*. Tunnel shafts *10-11-19*. Screw shaft *15-5-20*. Propeller *15-5-20*

Stern tube *16-4-20*. Steam pipes tested *26-6-20*. Engine and boiler seatings *13-5-20*. Engines holding down bolts *8-6-20*

Completion of pumping arrangements *15-7-20*. Boilers fixed *3-6-20*. Engines tried under steam *20-7-20*

Completion of fitting sea connections *16-4-20*. Stern tube *13-5-20*. Screw shaft and propeller *28-5-20*

Main boiler safety valves adjusted *20-7-20*. Thickness of adjusting washers *P 5" S 3 1/8" P 7 1/16" S 2 5/8" P 13" S 3 1/2"*

Material of Crank shaft *S*. Identification Mark on Do. *500 W.L.*. Material of Thrust shaft *S*. Identification Mark on Do. *500 J.R.*

Material of Tunnel shafts *S*. Identification Marks on Do. *500 J.R.*. Material of Screw shafts *S*. Identification Marks on Do. *500 J.R.*

Material of Steam Pipes *Wrought Iron*. Test pressure *600 lbs.*

Is an installation fitted for burning oil fuel *Yes*. Is the flash point of the oil to be used over 150°F. *Yes*

Have the requirements of Section 49 of the Rules been complied with *Yes*.

Is this machinery duplicate of a previous case *no.* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines and Boilers have been constructed under Special Survey. The materials and Workmanship good. The Engines and Boilers have been satisfactorily installed in the Vessel. examined under full steam and found satisfactory.*

This Vessel is eligible in my opinion to have the record of LMC 8-20 in the Register Book and the notation of fitted for oil fuel 8-20. Flash point above 150°F, and Forced Draught-fitted.

Vessel placed in dry dock for repairs to shell plating.

The Propeller and fastenings of stern bush and sea connections examined and found in good condition.

It is submitted that this vessel is eligible for THE RECORD + LMC 8-20 F.D.

Fitted for oil fuel 8-20 F.P. above 150°F.

Reel 12/8/20

Robinson

Engine Surveyor to Lloyd's Register of Shipping

The amount of Entry Fee ... £ *3* : 0 : 0

Special ... £ *47* : 3 : 0

Donkey Boiler Fee ... £ *✓* : :

Travelling Expenses (if any) £ *✓* : :

When applied for, *28/7/1920*

When received, *30/7/1920*

Committee's Minute

Assigned *+ LMC 8, 20. F.D.*

Fitted for oil fuel 8, 20 F.P. above 150°F.



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