

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

No. 77502

Received at London Office

FRI. 1 FEB. 1924

Date of writing Report

19

When handed in at Local Office

26/1/24

NEWCASTLE-ON-TYNE

No. in Survey held at
Reg. Book.

Newcastle

Date, First Survey

22 March 1924

(Number of Visits 45)

East Survey 25 January 1924

40943 on the

Steel Se.

SNOWDON

Tons { Gross 5230
Net 3220

Built at Newcastle

By whom built Northumberland S.S. Co. Ltd.

Yard No. 383

When built 1924

Engines made at Newcastle

By whom made N.E. Marine Eng. Co. Ltd.

Engine No. 2541

when made 1924

Boilers made at Newcastle

By whom made N.E. Marine Eng. Co. Ltd.

Boiler No. 2541

when made 1924

Registered Horse Power

Owners Inverclyde S.S. Co. Ltd.

Port belonging to Cardiff

Nom. Horse Power as per Rule

381

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Inverted - Triple Expansion

Dia. of Cylinders 25" 41" 68"

Length of Stroke 48"

Revs. per minute

No. of Cylinders 3

No. of Cranks 3

Dia. of Crank shaft journals

as per rule 13.33"

Dia. of Crank pin 14"

Crank webs

Mid. length breadth 22 3/4"

Thickness parallel to axis 8 1/4"

Diameter of Thrust shaft under collars

as per rule 13.33"

Diameter of Tunnel shaft

as per rule 12.695"

Diameter of Screw shaft

as per rule 14.18"

Is the Screw shaft

as fitted 14"

as fitted 13 1/4"

as fitted 13 1/4"

as fitted 15 1/2"

fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made watertight 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

If two liners are fitted, is the shaft lapped or protected between the liners

Is an approved appliance fitted at the after end of the shaft to permit

of it being efficiently lubricated

No

Length of Stern Bush

5' 6"

Diameter of Propeller

17' 3"

Pitch of Propeller

17' 3"

No. of Blades

Four

State whether Moveable

No

Total Surface

92 sq

square feet.

No. of Feed Pumps fitted to the Main Engines

Two

Diameter of ditto

4"

Stroke

26"

Can one be overhauled while the other is at work

Yes

No. of Bilge Pumps fitted to the Main Engines

Two

Diameter of ditto

4 1/2"

Stroke

26"

Can one be overhauled while the other is at work

Yes

Total number and size of power driven Feed and Bilge Auxiliary Pumps Two - One 7x5x8 Feed - One 6x4x8 Aux. Feed - One 9 1/2"x10" Ballast - One 7 1/2"x8" Am. Gr.

No. and size of Pumps connected to the Main Bilge Line

2 Main Engine and Ballast pumps

No. and size of Ballast Pumps

One 9"x11"x10"

No. and size of Lubricating Oil Pumps, including Spare Pump

None

Are two independent means arranged for circulating water through the Oil Cooler

Yes

No. and size of suction connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

Two 3 1/2"

and in Holds, &c. No. 1 Hold Two 3", No. 2 Hold

+ Cross Bunker Two - 3 1/2"

No. 3 Hold Two - 3"

No. 4 Hold Two - 3"

Tunnel Well One 2 1/2"

No. and size of Main Water Circulating Pump Bilge Suctions

One 9"

No. and size of Donkey Pump Direct Suctions

to the Engine Room Bilges

One 4 1/2"

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Yes

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

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

Below

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 Bilge Suctions

How are they protected

Wood-cased

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

compartment to another

Yes

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from Cylinder Top platform

MAIN BOILERS, &c.—(Letter for record S)

Total Heating Surface of Boilers

6330 sq

Forced Draft fitted

No

No. and Description of Boilers

3 S. E. Mult. Cyl.

Working Pressure 180 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

Yes

PLANS. Are approved plans forwarded herewith for Shafting

Yes

Main Boilers

Yes

Auxiliary Boilers

Yes

Donkey Boilers

Yes

(If not state date of approval)

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

2 Top End bolts & nuts - 2 Bottom End bolts & nuts - 2 main Bearing Bolts

One Set Coupling Bolts - 1 set feed & bilge pump valves - Quantity of assorted Bolts - nuts & rivets

Back Sea propellers - Screw shaft

The foregoing is a correct description

THE NORTH EASTERN MARINE ENGINEERING CO., LTD.

Manufacturer.

J. J. Harrison
Secretary.

© 2019

Lloyd's Register
Foundation

W225-0048

4. 77502.

1923
Mar 22. Apr 19. May 3. 7. 16. 17. June 1. 6. 7. 12. 13. 20. July 3. 12. 13. 18. 19. 26. 27. Aug 3. 15. 16. 22. 28.
31. Sep 4. 7. 14. Oct 2. 9. 12. 16. 24. 26. Nov 8. 9. 20. 30. Dec 7. 1924
Jan 10. 15. 17. 22. 24. 25.
During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits 45

Dates of Examination of principal parts - Cylinders 16. 8. 23 28. 8. 23 14. 9. 23 Slides 2. 10. 23
Covers 2. 10. 23 Pistons 12th June 1923 Rods 17th May 1923
Connecting rods 16. 8. 23 Crank shaft 13th July 1923 Thrust shaft 19th April 1923
Tunnel shafts 7th June 1923 Screw shaft 1st June 1923 Propeller 10th January 1924
Stern tube 30th Nov. 1923 Engine and boiler seatings 7th Dec. 1923 Engines holding down bolts 22nd Jan. 1924
Completion of pumping arrangements 25th Jan. 1924 Boilers fixed 22nd Jan. 1924 Engines tried under steam 25th Jan. 1924
Completion of fitting sea connections 7th Dec. 1923 Stern tube 7th Dec. 1923 Screw shaft and propeller 15th January 1924
Main boiler safety valves adjusted 25th Jan. 1924 Thickness of adjusting washers P 13/32" S 15/32" P 7/16" S 13/32" P 1/2" S 1/2"
Material of Crank shaft S. M. Steel Identification Mark on Do. 6509N. R.L.A. 13. 7. 23
Material of Thrust shaft S. M. Steel Identification Mark on Do. 6509N. R.L.A. 19. 4. 23
Material of Tunnel shafts S. M. Steel Identification Marks on Do. 6509N. R.L.A. 7. 6. 23
Material of Screw shafts S. M. Steel Identification Marks on Do. 6509N. R.L.A. 16. 5. 23 1. 6. 23
Material of Steam Pipes Solid-drawn Copper Test pressure 360 lbs/sq. in. Date of Test 17th January 1924
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 the Rules for carrying and burning oil fuel been complied with ✓
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 machinery of this vessel has been constructed under special survey. The materials and workmanship are sound and good. The main and auxiliary machinery have been tried out under steam with satisfactory results. The safety valves of the main boilers have been adjusted under steam. In my opinion the machinery of this vessel is eligible to have the notation + L.M.C. 1. 24 C.L. in the Register Book

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 1. 24. CL

Handwritten signature and date 27/2/24

The amount of Entry Fee ... £ 5 : - :
Special ... £ 82 : 3 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
Committee's Minute
Assigned + L.M.C. 1. 24 C.L.

When applied for, 30. JAN. 1924
When received, 15/2/24

R. Lee Amess
Engineer Surveyor to Lloyd's Register of Shipping.

FRIDAY 8 FEB 1924

FRI. FEB 15 1924



© 2019
Lloyd's Register
Foundation