

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

-1 JAN 1943

Date of writing Report

10

When handed in at Local Office

14 Dec 1942 Port of

SUNDERLAND.

No. in Survey held at
Reg. Book.

SUNDERLAND.

Date, First Survey

July 2

Last Survey

Dec 8

1942

on the

Ss "Shistlemuir"

(Number of Visits 68)

Tons

Gross 7237

Net 4293

Built at Sunderland By whom built

J. L. Thompson & Sons, Ltd.

Yard No.

622

When built 1942

Engines made at

do

By whom made H. E. Mas. Eng. Co. (1938) Ltd

Engine No.

4028

When made do

Boilers made at

do

By whom made

do

Boiler No.

do

When made do

Registered Horse Power

Owners

Allan, Black & Co.

Port belonging to

Sunderland

Nom. Horse Power as per Rule

509

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

General

ENGINES, &c.—Description of Engines

Triple Expansion

Revs. per minute

Dia. of Cylinders 24 1/2", 39", 70"

Length of Stroke 48"

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.0"

as fitted 14 1/4"

Crank pin dia. 14 3/4"

Crank webs

Mid. length breadth

shrunk

Thickness parallel to axis 9 7/8" 8 3/4"

Mid. length thickness

Thickness around eye-hole 6 9/16" 6 3/8"

Intermediate Shafts, diameter

as per Rule 13.34"

as fitted 13 5/8"

Thrust shaft, diameter at collars

as per Rule 14"

as fitted 14 1/4"

Tube Shafts, diameter

as per Rule

Screw Shaft, diameter

as per Rule 14.83"

as fitted 15 1/4"

Is the

tube

shaft

filled with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule 24.18/32"

as fitted 25/32", 26/32"

Thickness between bushes

as per Rule 18.12/32"

as fitted 21/32"

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 junctions made by fusion through the whole thickness of the liner

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 Oil Gland or other appliance fitted at the after end of the tube

shaft

no

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 5' 1"

Propeller, dia. 18' 0"

Pitch 15' 9"

No. of Blades 4

Material C.I.

whether Moveable

not

Total Developed Surface

117 sq. feet

Feed Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No.

2

Diameter 4"

Stroke 27"

Can one be overhauled while the other is at work

yes

Feed Pumps

No. and size

2. 9 1/2" x 7" x 21"

Pumps connected to the

No. and size

1, 9 1/2" x 7" x 21" & 1, 10 1/2" x 13" x 24"

How driven

Steam

Main Bilge Line

How driven

Steam

Ballast Pumps, No. and size

1, 10 1/2" x 13" x 24"

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

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

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room

Eng. Rm. 3" & 3" dia.

Boiler Rm. none

Thrust room 1" & 1 1/2" dia.

In Pump Room

In Holds, &c. 2" & 3" dia. in each of holds nos. 1, 2, 3, 4, 9

N°5. 1" & 4" dia; Tunnel 1" & 2 1/2" dia.; Cross bunker 2" & 3" dia.; Deep tank 2" & 3" dia.

Main Water Circulating Pump Direct Bilge Suctions, No. and size

1" & 9" dia

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1" & 5" dia. & 1" & 3" dia. post. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

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

Are all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Overboard Discharges above or below the deep water line both

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

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

What Pipes pass through the bunkers

How are they protected

What pipes pass through the deep tanks

Have they been tested as per Rule

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

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

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

MAIN BOILERS, &c.—(Letter for record 5)

Total Heating Surface of Boilers

7248 sq. ft.

Which Boilers are fitted with Forced Draft

all

Which Boilers are fitted with Superheaters

none

No. and Description of Boilers

3. S. E. Cylindrical

Working Pressure

220 lb.

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

Can the donkey boiler be used for domestic purposes only

PLANS.

Are approved plans forwarded herewith for Shafting 3/7/42

Main Boilers 20/3/42

Auxiliary Boilers

Donkey Boilers

Superheaters

General Pumping Arrangements 20/4/42

Oil fuel Burning Piping Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

The foregoing is a correct description.

THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

J. H. Smith

Manufacturer.

RESIDENT MANAGER.



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004369-004373-0377

1942. July. 2, 3, 8, 9, 13, 15, 16, 20, 21, 23. Aug. 4, 5, 6, 7, 8, 10, 12, 13, 17, 19, 20, 24, 25, 27
During progress of work in shops - - 28, 31. Sep. 1, 2, 3, 4, 7, 9, 11, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 28, 29, 30. Oct. 3, 5, 8, 10, 12, 19, 21, 22,
Dates of Survey while building During erection on board vessel - - - 23, 24, 26, 27, 28, 30. Nov. 2, 9, 10, 18. Dec. 4, 8
Total No. of visits 68

Dates of Examination of principal parts—Cylinders 4, 9 & 11/9/42. Slides 29/9/42. Covers 11/9/42.
Pistons 16/9/42. Piston Rods 16/9/42. Connecting rods 22/9/42.
Crank shaft 14/9/42. Thrust shaft 14/9/42. Intermediate shafts 23/10/42.
Tube shaft — Screw shaft 3/10/42. Propeller 5/10/42.
Stern tube 3/10/42. Engine and boiler seatings 21/9/42. Engines holding down bolts 9/11/42.
Completion of fitting sea connections 30/9/42.
Completion of pumping arrangements 4/12/42. Boilers fixed 18/11/42. Engines tried under steam 18/11/42 & 8/12/42.
Main boiler safety valves adjusted 18/11/42. Thickness of adjusting washers Port 3/8". Centre 3/8" std. 13/32" port. Std 13/32".
Crank shaft material Steel Identification Mark Single 8411. Thrust shaft material Steel Identification Mark 8409. 8321.
Intermediate shafts, material Steel Identification Marks 8323, 4, 5, 6, 7, 8, 9. Tube shaft, material — Identification Mark —
Screw shaft, material Steel Identification Mark 8322. Steam Pipes, material Steel Test pressure 660 lb. Date of Test 22/10/42 to 3/11/42.
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 the use of oil as fuel been complied with —
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with —
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Not required.
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 in accordance with the approved plans, Secretary's letters and the requirements of the Rules. Workmanship and materials are good.

The machinery has been efficiently fitted on board and tried under working conditions with satisfactory results and is eligible, in my opinion, for the

NOTATION + L.M.C. 12.42, C.L., 3.S.B. 220 lb. F.D.

L.R. Home

The amount of Entry Fee ... £ 6 : 0 :
Special ... £ 100 : 9 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 14 DEC 1942
When received, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FEB. 8 JAN 1943

Assigned

+ Lmb. 12.42
20, L.



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