

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

31 JUL 1941

Date of writing Report

When handed in at Local Office

14/7/1941 Port of Newcastle-on-Tyne

No. in Survey held at  
Reg. Book.

Newcastle on Tyne

Date, First Survey

11/12/39

Last Survey

3/7/1941

(Number of Visits 161.)

8219

on the S/S ENNERDALETons { Gross 8219  
Net 4719

Built at Newcastle

By whom built

Swan, Hunter &amp; Wigham Richardson Ltd

Yard No. 1656

When built 1941-

Engines made at do.

By whom made

ditto.

Engine No. 1656

When made 1941-

Boilers made at do.

By whom made

ditto

Boiler No. 1656

When made 1941-

Registered Horse Power

Owners

Port belonging to LONDON.

Nom. Horse Power as per Rule 629.

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

Trade for which Vessel is intended

Ocean going - Carrying Petroleum in bulk.

ENGINES, &amp;c.—Description of Engines 3 Cyl Triple Exp Recip.

Revs. per minute 84 Service

Dia. of Cylinders 26½, 44, 73

Length of Stroke 48"

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.66

as fitted 15½"

Crank pin dia. 15½"

Crank webs

Mid. length breadth

shrink

Thickness parallel to axis 9.5625

Intermediate Shafts, diameter as per Rule 13.96

as fitted 14"

Thrust shaft, diameter at collars

as per Rule 14.66

as fitted 14.34"

Tube Shafts, diameter as per Rule

as fitted

Screw Shaft, diameter as per Rule 15.42

as fitted 15½"

Is the

shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes as per Rule 24.7/32"

as fitted 25/32"

Thickness between bushes as per Rule 18.5/32"

as fitted 23/32"

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 In one piece.

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

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 62½"

Propeller, dia. 17'-6"

Pitch 14'-6"

No. of Blades 4

Material Mang. Bg.

whether Moveable No

Total Developed Surface 104 sq. feet

Feed Pumps worked from the Main Engines, No. none

Diameter

Stroke

Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No. 2

Diameter 6"

Stroke 26"

Can one be overhauled while the other is at work Yes

No. and size 2 of 10½" x 8" x 21"

Pumps connected to the

No. and size

one Ballast. 10" x 11" x 10" dup, &amp; two Single acting 6" x 26"

How driven By Steam

Main Bilge Line

How driven

By Steam

By main engine.

Ballast Pumps, No. and size 10" x 11" x 10" Duplex.

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 3 of 3½" dia.

only bilge wells 2 of 2½"

In Pump Room 2 of 4" in each pump room.

In Holds, &amp;c. 2 of 2½" in Forehold, 1 of 2" in Forehold Pump Room,

&amp; 2 of 2" at Peak Tank Top.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 9" dia.

on Port Side

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size One 5" dia on Starboard Side

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 Sea Connections fitted direct on the skin of the ship

Yes

Are they fitted with 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 Overboard Discharges 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 pass through the bunkers

None

How are they protected

Yes

What pipes pass through the deep tanks

None

Have they been tested as per Rule

Yes

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 Shaft Tunnel watertight

None

Is it fitted with a watertight door

Yes

worked from

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

Total Heating Surface of Boilers

9555 sq. ft.

Which Boilers are fitted with Forced Draft

all 3 Boilers

Which Boilers are fitted with Superheaters

all 3 Boilers

No. and Description of Boilers

Three Single ended.

Working Pressure

220 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

Can the donkey boiler be used for domestic purposes only

Yes

PLANS.

Are approved plans forwarded herewith for Shafting

17/10/39

Main Boilers

31/10/39

Auxiliary Boilers

Yes

Donkey Boilers

Yes

(If not state date of approval)

Superheaters

General Pumping Arrangements

21/5/40 &amp; 30/5/40

Oil fuel Burning Piping Arrangements

Pumping Arrangements in E.R. 13/4/40 &amp; 15/6/40

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

1. propeller shaft, 12 gauge glasses, 50 fernules &amp; 100 packings for Condenser,

6 piston bolts, 4 cam rollers &amp; spindles for HP valve gear, 1 valve spindle for HP valve gear,

12 plain boiler tubes; 20% of jointing washers, 10% studs &amp; nuts, 10% header plugs &amp; 2% clamps

for Superheaters.

The foregoing is a correct description.

SWAN, HUNTER, &amp; WIGHAM RICHARDSON LTD.

G. J. Sweeney

DIRECTOR

Manufacturer.

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Lloyd's Register  
Foundation



1939  
 Dec. 11. 14. 19. 29. 1940  
 Jan. 4. 11. 15. 19. 22. 23. 24. 26. 31. Feb. 5. 6. 7. 13. 15. 16. 19. 20. 21. 22. 23. 26. 27. 29. Mar. 5. 6. 7. 11.  
 12. 13. 14. 15. 16. 19. 20. 21. 26. 28. 29. Apr. 3. 4. 8. 10. 18. 19. 29. May 1. 8. 10. 16. 24. June 3. 10. 12. 14. 24. 25. 26.  
 July 1. 2. 3. 4. 8. 15. 17. 25. 30. 31. Aug. 13. 22. 23. 26. Sep. 4. 26. 30. Oct. 10. 18. 22. Nov. 6. 14. 19. 25. 26.  
 28. Dec. 3. 9. 11. 13. 17. 19. 23. 24. 27. 1941  
 Jan. 2. 3. 6. 7. 8. 9. 10. 15. 16. 18. 20. 22. 24. 29. Feb. 3. 4. 5. 6. 13. 15.  
 21. 24. 25. 26. 28. Mar. 3. 4. 7. 11. 12. 14. 18. 24. 25. 26. 27. 28. 31. Apr. 1. 2. 4. 7. 8. 9. 11. 15. 16. 29.  
 30. May 5. 7. 15. 20. 22. 29. June 4. 6. 17. 18. 19. 24. 26. July 2. 3.

Dates of Survey while building  
 During progress of work in shops - -  
 During erection on board vessel - -  
 Total No. of visits 161.

Dates of Examination of principal parts—Cylinders 18/3/40 & 26/3/40 Slides 2/1/41 Covers 18/3/40 & 26/3/40  
 Pistons 2/1/41 Piston Rods 2/1/41 Connecting rods 28/1/41  
 Crank shaft 28/3/40 Thrust shaft 28/3/40 Intermediate shafts 8/1/41  
 Tube shaft ✓ Screw shaft 19/12/40 Propeller 18/1/41  
 Stern tube 10/1/41 Engine and boiler seatings 10/1/41 Engines holding down bolts 13/2/41  
 Completion of fitting sea connections 24/1/41  
 Completion of pumping arrangements 21/5/41 Boilers fixed 24/3/41 Engines tried under steam 21/5/41 & 4/6/41  
 Main boiler safety valves adjusted 21/5/41 Thickness of adjusting washers *FOR P.V. S.V. Spt. PORT BLR 1/4 1/16 5/16 3/8 STBD BLR 1/4 15/32 5/16 6/32*  
 Crank shaft material *Steel* Identification Mark 8606 AW 28-3-40 Thrust shaft material *Steel* Identification Mark 9063 DB  
 Intermediate shafts, material *Steel* Identification Marks 9063 HA1. 631. Tube shaft, material ✓ Identification Mark 633.  
 Screw shaft, material *Steel* Identification Mark 9063 DB 627. Steam Pipes, material *S.D. Steel* Test pressure 660 lbs. Date of Test 9/12/40 to 15/4/41  
 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 the Rules for the use of oil as fuel been complied with *Yes*  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ 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, and the Society's Rules, and the materials and workmanship are good.

The machinery has been efficiently installed on board the vessel, tried under working conditions with satisfactory results, and is eligible in my opinion, for record + LMC T. 41, and the notations 3SB(Spt), FD, 220<sup>h</sup>, CL.

The amount of Entry Fee ... £ 6 : 0 :  
 Special ... £ 106 : 9 :  
 Donkey Boiler Fee ... £ ✓ :  
 Travelling Expenses (if any) £ < :

When applied for, 129 JUL 1941  
 When received, 19

Committee's Minute

Assigned

f Lmb 7.41 subject  
 fitt. for oil fuel re  
 J.D. C.L.

A Watt

Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 26 AUG 1941



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