

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 9 MAY 1927

Date of writing Report

When handed in at Local Office

6/5/1027 Port of

NEWCASTLE-ON-TYNE.

No. in Survey held at  
Reg. Book.

Date, First Survey 27 Jan

Last Survey 5 May

1927

on the New Steel S. S. Windsolite

(Number of Visits 33.)

Built at Haverton Hill on Tyne By whom built Furness Shipbuilding Co. Ltd

Yard No. 115

Gross Tons

When built 1924

Engines made at Wallsend on Tyne By whom made North Eastern Marine &amp; Cold

Engine No. 2638

when made 1924

Boilers made at ditto By whom made ditto

Boiler No. 2638

when made 1924

Registered Horse Power

Owners

Imperial Oil Co.

Port belonging to Windsor

Nom. Horse Power as per Rule

158

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

Great Lakes, Carrying Petroleum in Bulk.

## ENGINES, &amp;c. - Description of Engines

Triple Expansion

Dia. of Cylinders 14" x 28" x 46"

Length of Stroke 36"

No. of Cylinders 3

Revs. per minute 48

Crank shaft, dia. of journals as per Rule 9.246"

Crank pin dia. 9.18"

Crank webs

Mid. length breadth 16.1"

No. of Cranks 3

Thickness parallel to axis 6"

Intermediate Shafts, diameter as per Rule 8.8"

as fitted none

Thrust shaft, diameter at collars as per Rule 9.246"

as fitted 9.18"

Thickness around eye-hole 4.3"

Tube Shafts, diameter as per Rule none

Screw Shaft, diameter as per Rule .60

as fitted 10"

Is the tube screw shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes as per Rule 5.8"

as fitted 5.8"

Thickness between bushes as per Rule 4.5"

as fitted 4.5"

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

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

yes

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

Length of Bearing in Stern Bush next to and supporting propeller

4 1/2"

Propeller, dia. 13 1/2" Pitch 12'-0"

No. of Blades 4

Material Bronze

whether Moveable yes

Total Developed Surface 58 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. none

Diameter

Stroke

Can one be overhauled while the other is at work

Feed Pumps No. and size Two Weirs 5' x 7' x 12"

How driven Steam

Pumps connected to the Main Bilge Line

No. and size Two 6' x 4' x 6"

How driven Steam

Ballast Pumps, No. and size 2 @ 12' x 8' x 10"

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

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

none

Bilge Pumps; - In Engine and Boiler Room 1 @ 3 1/2" in Engine room, 2 @ 3 1/2" in Boiler Room

Suctions, connected to both Main Bilge Pumps and Auxiliary

In Holds, &amp;c. Carrying petroleum in bulk, 1-2 1/2" in after hold, 1-2" in forward cargo hold 1-2"

1-2 1/2" cargo pump room

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 3 1/2"

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

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 3 1/2"

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

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

What Pipes are carried through the bunkers

What pipes pass through the deep tanks

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, &amp;c. - (Letter for record P)

Is Forced Draft fitted

No. and Description of Boilers One single Ended

Working Pressure 180 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?

PLANS. Are approved plans forwarded herewith for Shafting

(If not state date of approval)

Superheaters

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied: - 1 Tail shaft, 1 Propeller, 2 Complete with 2 bronze blades.

1 set Head &amp; crank pin braces. 2 Main bearing bolts nuts, 1 set top &amp; bottom end

bolts, 1 set coupling bolts, 1 set pin pin for each piston, 1 HP valve spindle,

1 set valve spindle, 1 set drop, 1 set fuel oil pump valves, 1 steam chest &amp;

valve for Weir feed pp. 1 set Main feed check valve &amp; seats, 1 set escape valve

springs, 1 set safety valves &amp; springs, 4 steel fuel oil heater coils 3 suction &amp;

discharge O.F. strainers baskets, 2 burners complete 24 tips &amp; 24 small strainers.

Quantity of bolts nuts &amp; iron.

The foregoing is a correct description,

FOR THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

Manufacturer.



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Lloyd's Register  
Foundation

011341-011351-0174



1927  
 During progress of work in shops - - { Jan 27-31 Feb. 2-3 7-17 24-28 Mar. 4-7 8-11 14-18 21-22 24-25 28-29 30-31 April 4-8 9  
 13-21 22-25 30 May 2-4-5  
 Dates of Survey while building {  
 During erection on board vessel - - -  
 Total No. of visits 33.

Dates of Examination of principal parts—Cylinders 22-3-24 Slides 9-3-24 Covers 22-3-24  
 Pistons 14-3-24 Piston Rods 9-3-24 Connecting rods 9-3-24  
 Crank shaft 14-3-24 Thrust shaft 24-3-24 Intermediate shafts none  
 Tube shaft none Screw shaft 18-3-24 Propeller 11-3-24  
 Stern tube 24-3-24 Engine and boiler seatings 29-3-24 Mho. Engines holding down bolts 25-4-24  
 Completion of pumping arrangements 14-5-24 Boilers fixed 22-4-24 Engines tried under steam 2-5-24  
 Main boiler safety valves adjusted 2-5-24 Thickness of adjusting washers 7V. 5/8" 8Y 9/16"  
 Crank shaft material OH Steel Identification Mark 4631 W.B. Thrust shaft material OH Steel Identification Mark 4631 W.B.  
 Intermediate shafts, material none Identification Marks ✓ Tube shaft, material none Identification Mark ✓  
 Screw shaft, material OH Steel Identification Mark 4631 W.B. Steam Pipes, material SD Steel Test pressure 540 lbs Date of Test 13-4-24  
 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 carrying and burning oil fuel 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 Machinery of this Vessel has been built under Special Survey. Materials & Workmanship good. Hydraulic tests satisfactory. It is efficiently installed & fixed in the Vessel and was tried under steam and is in good & safe working condition and eligible in my opinion to be classed and have records. ✱ LMC 5-24. T.S. C.L.  
 "Fitted for oil fuel F.P. above 150°F" - 5-24.

The cofferdam is filled with fuel oil for bunkers for the voyage to the Great Lakes. In order to pump the oil a cross connection is provided to the fuel oil pumps and the bilge suction blanked off. Suitable blank flanges & spectacle pieces are fitted to facilitate the change over at the home port.

It is submitted that  
 this vessel is eligible for  
 THE RECORD. + LMC 5. 27. CL.

Fitted for oil fuel 5. 27. FP above 150°F.

The amount of Entry Fee ... £ 3 : 0 0 :  
 Special ... £ 39 : 10 0 :  
 Donkey Boiler Fee ... £ ✓ :  
 Travelling Expenses (if any) £ ✓ :  
 When applied for, 27 MAY 1927  
 When received, 12/5/27

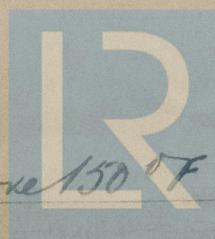
W.D.  
 11/5/27  
 William Dutton  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 17 MAY 1927

Assigned

+ L.M.C. 5:24 CL  
 Fitted for Oil Fuel 5:27 F.P. above 150°F



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