

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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Date of writing Report 19<sup>th</sup> April 1930. When handed in at Local Office 2<sup>nd</sup> May 1930. Port of Lerwick

No. in Survey held at Lerwick Date, First Survey 19<sup>th</sup> August 1929 Last Survey 30<sup>th</sup> April 1930  
Reg. Book. S/S "Dalfram" (Number of Visits 16)

Built at Lerwick By whom built Scotts Shipbuilding & Engineering Co. Ltd. Yard No. 546 Tons { Gross 1554.5k  
Net 2921.02

Engines made at ditto By whom made ditto Engine No. 618 When built 1930  
Boilers made at ditto By whom made ditto Boiler No. 618 when made 1930

Registered Horse Power Owners United Steam Navigation Co. Ltd. Port belonging to Lerwick

Nom. Horse Power as per Rule 450 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended Foreign

**ENGINES, &c.**—Description of Engines Quadruple Expansion Revs. per minute 42  
 Dia. of Cylinders 21 1/2 - 31 - 45 - 65 Length of Stroke 48 No. of Cylinders 4 No. of Cranks 4  
 Crank shaft, dia. of journals as per Rule 13 5/8 Crank pin dia. 13 5/8 Crank webs Mid. length breadth shrunk Thickness parallel to axis 6 5/8  
 as fitted 13 5/8 Mid. length thickness shrunk Thickness around eye-hole 6 1/16  
 Intermediate Shafts, diameter as per Rule 12.9 Thrust shaft, diameter at collars as per Rule 13 5/8  
 as fitted 13 as fitted 13 5/8  
 Tube Shafts, diameter as per Rule 14 1/4 Screw Shaft, diameter as per Rule 14 5/8 Is the tube shaft fitted with a continuous liner Yes  
 as fitted 14 1/4 as fitted 14 5/8 Is the screw shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule 13 1/16 Thickness between bushes as per Rule 17 1/32 Is the after end of the liner made watertight in the  
 as fitted 13 1/16 as fitted 17 1/32 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 Length of Bearing in Stern Bush next to and supporting propeller 5' 0"  
 Propeller, dia. 18' 0" Pitch 14' 6" No. of Blades 4 Material Brown whether Moveable No Total Developed Surface 92 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 4" Stroke 24" Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size 3 (2.9 1/2 + 7 + 12) (1 - 4 + 5 + 12) Pumps connected to the { No. and size 2 (8 + 8 + 8) (10 + 12 + 12)  
 How driven Steam Main Bilge Line { How driven Steam  
 Ballast Pumps, No. and size one 10 + 12 + 12 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 2 3 1/2 in Engine Room 2 3 1/2 in Boiler Room 1 - 3' Trunk Well  
 In Holds, &c. 2 3" Fore hold. 2 3 1/2 Fore main hold. 2 3 1/2 Deep Tank 2 3 1/2  
in after main hold

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 8" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size one 5" 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 mid-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 Above  
 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 Bilge suction How are they protected Casings  
 What pipes pass through the deep tanks ditto 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 Yes Is it fitted with a watertight door Yes worked from U.E.R. PLATFORM

MAIN BOILERS, &c. (Letter for record R.) Total Heating Surface of Boilers 6300 sq ft

Is Forced Draft fitted Yes No. and Description of Boilers 3 Single ended Working Pressure 250

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? —

PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers — Donkey Boilers —  
(If not state date of approval)

Superheaters — General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements —

SPARE GEAR. State the articles supplied:— 2 Connecting Rod Bolts, nuts for Top End  
ditto for bottom end, 2 Main Bearing Bolts one set of  
coupling bolts one set of Feed & Bilge Pump valves  
a quantity of assorted bolts, nuts, iron of various sizes

The foregoing is a correct description,  
SCOTT'S SHIPBUILDING & ENGINEERING COMPANY  
LIMITED.

Manufacturer.

Arch: Rennie Chief Draughtsman.



