

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

20 MAR 1935

Date of survey report 8. 3 1935 which was made in at Local Office 16th MARCH 1935. Port of Greenock

No. in Survey held at Greenock Date, First Survey 23rd APRIL 1929 Last Survey 14th MARCH 1935
Reg. Book. on the S/S DARCOLD (Number of Visits 104)

Built at Glasgow By whom built Wm. Hamilton & Co. Yard No. 409 Tons { Gross 4296.53
Net 2163.34
When built 1935

Engines made at Greenock By whom made John Kincaid & Co. Engine No. 660 When made 1935

Boilers made at ditto By whom made ditto Boiler No. 660 When made 1935

Registered Horse Power Owners Hearns Shipping Co. Port belonging to Glasgow

Nom. Horse Power as per Rule 436 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
476 with Compressor

Trade for which Vessel is intended Foreign

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 65

Dia. of Cylinders 25"-38"-70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13.707 Crank pin dia. 13 3/4" Crank webs Mid. length breadth shrunk Thickness parallel to axis 8 1/2"
as fitted 13 3/4" Mid. length thickness shrunk Thickness around eye-hole 6 3/16"

Intermediate Shafts, diameter as per Rule 13.06 Thrust shaft, diameter at collars as per Rule 13.707
as fitted 13 1/8" as fitted 13 3/4"

Tube Shafts, diameter as per Rule 14.5 Screw Shaft, diameter as per Rule 14 3/4" Is the lube shaft fitted with a continuous liner Yes
as fitted 14 3/4" as fitted 14 3/4" Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 3/4 Thickness between bushes as per Rule 9/16 Is the after end of the liner made watertight in the
as fitted 3/4 as fitted 5/8" 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 Yes

shaft No If so, state type Oil Gland Length of Bearing in Stern Bush next to and supporting propeller 59"

Propeller, dia. 17 1/2" Pitch 17.9" No. of Blades 4 Material Brass whether Movable No Total Developed Surface 100 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 2 1/2" Can one be overhauled while the other is at work Yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 2 1/2" Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size one 8x6x8 (Duplex) Pumps connected to the { No. and size one 9x13x10
How driven Steam Main Bilge Line { How driven Steam

Ballast Pumps, No. and size one 9x13x10 Lubricating Oil Pumps, including Spare Pump, No. and size one

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room Sal. 3" Tunnel Well. 1-2 1/2" In Holds, &c. No. 2. 2 3/4" No. 3. 2. 3 1/2" each No. 4. 2.3"

In Pump Room No. 5. 2. 2 3/4"

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 Yes 4 1/2" (one) Are all the Bilge Suction Pipes in holds and tunnel well fitted with stram-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 above & 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 None

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 Yes Is it fitted with a watertight door Yes worked from Upper Platform

MAIN BOILERS, &c.—(Letter for record 3) Total Heating Surface of Boilers 4895 sq. ft.

Is Forced Draft fitted No No. and Description of Boilers 3 Single Ended Working Pressure 200

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

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

Is the donkey boiler intended to be used for domestic purposes only Yes

PLANS. Are approved plans forwarded herewith for Shafting 11-1-29 Main Boilers Yes Auxiliary Boilers — Donkey Boilers —

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

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied one cast Iron Propeller

The foregoing is a correct description,
For JOHN G. KINCAID & CO. LIMITED.

Director. Manufacturer.



© 2020

Lloyd's Register

Foundation

W1146-0042

NOTE: The words which do not apply should be deleted.

(1929) April 27-29, May 13-14, 20-22, 28-28, June 13, July 11-15, 18, Aug. 11-22, Sept. 11, Oct. 18-21, Nov. 1-15, 25, Dec. 2-5 (1930) Feb. 3-24, Mar. 5-10, 12, 14, 20-31.
 During progress of work in shops - - -
 April 1-7, May 5-7, 21-22, June 10-14, 24-26, 30, July 25-30, Aug. 1, Oct. 22-28, 30, Nov. 7 (1931) Feb. 12, Mar. 19-21, 31, April 6, 8-15, 21, May 5-25, Oct. 13, Nov. 13-26 (1932) Jan. 8
 During erection on board vessel - - -
 Mar. 11, April 25, Aug. 19, Oct. 24 (1933) May 1, Dec. 1 (1934) Feb. 28, Nov. 24-28, Dec. 4-5, 11, 13-19, 27 (1935) Jan. 8-9, 11-14, 16-17, 23-25, 28-31
 Feb. 5-4, 12, 13-15, 16, 18, 20-22, 27-28, Mar. 1-5, 9, 11-12, 14

Total No. of visits 104.
 Dates of Examination of principal parts—Cylinders 5-3-30 Slides 25-7-30 Covers 5-3-30
 Pistons 23-1-35 Piston Rods 23-1-35 Connecting rods 31-3-30
 Crank shaft 31-1-35 Thrust shaft 14-1-35 Intermediate shafts 14-1-35
 Tube shaft ✓ Screw shaft 31-1-35 Propeller 31-1-35
 Stern tube 4-12-34 Engine and boiler seatings 23-1-35 Engines holding down bolts 7-3-35
 Completion of fitting sea connections 23-1-35
 Completion of pumping arrangements 7-3-35 Boilers fixed 20-2-35 Engines tried under steam 14-3-35
 Main boiler safety valves adjusted 12-3-35 Thickness of adjusting washers PV 3/8 SV 7/16 Port. Y 7/16 Star V 3/8 PV 3/8 PF SV 3/8
 Crank shaft material S Identification Mark LR 660 WGM Thrust shaft material S Identification Mark LR 180 WGM.
 Intermediate shafts, material S Identification Marks 1822, 1803 WGM. Tube shaft, material - Identification Mark -
 Screw shaft, material S Identification Mark LR 180 WGM Steam Pipes, material S Test pressure 600 Date of Test 16-2-35
 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 -
 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.) These Engines & Boilers have been built under special survey in accordance with the approved plans & the workmanship & material are of good quality. They have now been securely fitted on board, also the Rowan-Hotchkiss Turbo Compressor designated No TC 154. Tried under working conditions & found satisfactory.
 The machinery is eligible in my opinion for the record of **L.M.C. 3-35**

The Surveyors are requested to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 5 - :
 Special ... £ 90 8 :
 Fitting of boiler on board ... £ 4 - :
 Travelling Expenses (if any) £ : :

When applied for, 17 MARCH 1935.
 When received, 19.3.35

Wm Gordon-Mucliss
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 19 MAR 1935

Assigned T.M.C. 3, 35.
 T.S. (C.L.)



Is a Report also sent on the Hull of the Ship? If not, state whether, and when, one will be sent.