

BERKEL

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 7 DEC 1945

Date of writing Report 14th April 1945 When handed in at Local Office 14th April 1945 Port of Copenhagen
 No. in Survey held at Elisium Date, First Survey 28th February 44 Last Survey 2nd April 1945
 Reg. Book. Elisium (Number of Visits 27)
 on the -
 Built at Stockholm By whom built a/b Finnboda Varf Yard No. 332 Tons -
 Engines made at Elisium By whom made a/s Helsingørsk Maskinbyggeri Engine No. 410 When built -
 Boilers made at - By whom made - Boiler No. - When made -
 Registered Horse Power 241 Owners - Port belonging to -
 Indicated Reciprocating 1325 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -
 Horse Power as per Rule 400 (appd 425) Trade for which Vessel is intended -

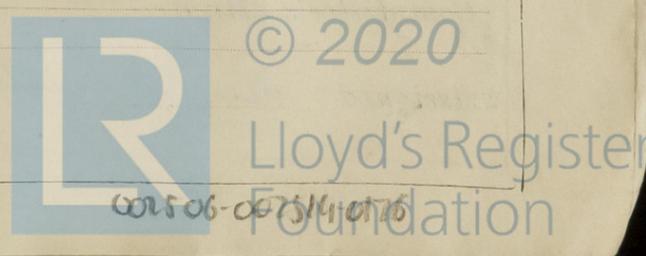
ENGINES, &c.—Description of Engines Vertical engine with 2 HP & 1 LP cylinder. char. cut off 45% combined with exhaust steam turbine Revs. per minute 115
 Dia. of Cylinder 2 HP 400 mm / LP 1000 mm Length of Stroke 950 mm No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 264 mm Crank pin dia. 265 mm Crank webs Mid. length breadth 420 mm Thickness parallel to axis 165 mm
as fitted 265 mm Mid. length thickness 165 mm Thickness around eye-hole 120 mm
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube } shaft fitted with a continuous liner { screw }
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the propeller boss as fitted
 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
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller
 Propeller, dia. - Pitch - No. of Blades - Material - whether Moveable - Total Developed Surface - 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 110 mm Stroke 250 mm Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size } Pumps connected to the { No. and size }
 { How driven } Main Bilge Line { How driven }
 Ballast Pumps, No. and size - 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 -
 In Pump Room - In Holds, &c. -

Main Water Circulating Pump Direct Bilge Suctions, No. and size - **Independent Power Pump Direct Suctions to the Engine Room Bilges,** -
 No. and size - 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 -
 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 -) Total Heating Surface of Boilers -
 Which Boilers are fitted with Forced Draft - Which Boilers are fitted with Superheaters -
 No. and Description of Boilers - Working Pressure -
IS A REPORT ON MAIN BOILERS NOW FORWARDED? -
IS A DONKEY BOILER FITTED? - 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 yes Main Boilers - Auxiliary Boilers - Donkey Boilers -
 (If not state date of approval)
 Superheaters - General Pumping Arrangements - 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 -

The foregoing is a correct description.
ACTIESELSKABET
HELSINGØRS JERNSKIBS- OG MASKINBYGGERI
 Manufacturer.



Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits 27.

23/2-7/3-24/3-3/3-12/4-19/5-31/5-10/6-20/6-28/6-22/7-24/7-4/8-10/8-24/8-30/8-7/9
6/10-20/10-9/11-7/11-14/11-19/11-4/1-13/3-3/4-12/4-19/45

Dates of Examination of principal parts - Cylinders 10/6-28/6-20/10-4/11-14/12-20/2 Slides
Pistons 3/5-10/6-28/6-20/10-20/2 Piston Rods 24/7-24/8-7/11 Connecting rods 23/2-12/4-7/11
Crank shaft 23/2-12/4-3/5-6/6-7/11 Thrust shaft 23/2-10/8-7/11 Intermediate shafts
Screw shaft Propeller

Tube shaft Engines holding down bolts
Stern tube Engine and boiler seatings

Completion of fitting sea connections Boilers fixed Engines tried under steam
Completion of pumping arrangements

Main boiler safety valves adjusted Thickness of adjusting washers
Crank shaft material S.M.P. Steel Identification Mark 47.11.44 Thrust shaft material S.M.P. Steel Identification Mark 47.11.44

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark
Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel 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 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? yes If so, state name of vessel *Felington's Type H-9.5.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The above engine (exclusive the condenser) has been built under special survey in accordance with the Rules and the approved plans and to my satisfaction. The material used in construction has been tested as required by the Rules and the workmanship is good. For particulars of exhaust steam turbine please see special report herewith.*

The amount of Entry Fee ... £ : : When applied for, 16.4.45.
Special ... £ 74.800.00 : :
Donkey Boiler Fee ... £ : : When received, : :
Travelling Expenses (if any) £ 120.00 : : 19

J. Langhild Jensen.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 10 JAN 1947**
Assigned *See F.E. mch. rpt.*

Certificate to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

