

REPORT ON OIL ENGINE MACHINERY.

No 102524

Received at London Office

EC 1944

of writing Report

19 When handed in at Local Office 13.12. 1944 Port of NEWCASTLE-ON-TYNE

Date, First Survey 1943 June 30th Last Survey Dec. 1st 1944

Number of Visits 78

in Survey held at

Book.

On the

at

ines made at

key Boilers made at

ve Horse Power

6. Horse Power as per Rule

for which vessel is intended

ENGINES, &c.

om pressure in cylinders

ndicated Pressure

bearings, adjacent to the Crank, measured from inner edge to inner edge

ions per minute

ft. {

eel Shaft, diameter

Shaft, diameter

Liners, thickness in way of bushes

boss

ner 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

liners are fitted, is the shaft lapped or protected between the liners

NO. If so, state type

ler, dia.

d of reversing Engines

ED. Thickness of cylinder liners

lucting material

Water Pumps, No.

Pumps worked from the Main Engines, No.

connected to the Main Bilge Line

ooling water led to the bilges

ents

Pumps, No. and size

independent means arranged for circulating water through the Oil Cooler

No. and size:—In Machinery Spaces

s, &c.

ndent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Sea Connections fitted direct on the skin of the ship

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

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

oes pass through the bunkers

oes pass through the deep tanks

Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

angement 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

ent to another

d vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

ir Compressors, No.

ary Air Compressors, No.

Auxiliary Air Compressors, No.

provision is made for first Charging the Air Receivers

enging Air Pumps, No.

OIL

ary Engines crank shafts, diameter

the Auxiliary Engines been constructed under special survey

Dec. 13.6

M. "NAVICELLA"

Tons Gross 8255. Net 4765.

By whom built RAW. HAWTHORN. LESLIE & CO. LD. Yard No. 663. When built 1944.

By whom made " " " Engine No. 4003. When made 1944.

By whom made N.E. MARINE. ENG. CO. LD. Boiler No. 3073. When made 1944.

Owners ANGLO-SAXON PETROLEUM CO. LD. Port belonging to LONDON.

Is Refrigerating Machinery fitted for cargo purposes NO. Is Electric Light fitted YES.

OCEAN GOING. CARRYING PETROLEUM IN BULK.

Type of Engines HAWTHORN - WERKSPOR SUPERCHARGED. 2 or 4 stroke cycle 4 Single or double acting SINGLE.

700 LBS/SQ. IN. Diameter of cylinders 650 M/M. Length of stroke 1400 M/M. No. of cylinders 8. No. of cranks 8.

135 LBS/SQ. IN. 844 M/M. Is there a bearing between each crank YES.

120. Flywheel dia. 2260 M/M. Weight 6000 KG. Means of ignition HEAT OF COMPRESSION. Kind of fuel used HEAVY OIL FUEL.

448 M/M. Crank pin dia. 460 M/M. Crank Webs Mid. length breadth 870 M/M. Thickness parallel to axis 267 M/M. 290 M/M.

448 M/M. Intermediate Shafts, diameter 470 M/M. Thrust Shaft, diameter at collars 341 M/M. 460 M/M.

358 M/M. Is the shaft fitted with a continuous liner YES.

18.55 M/M. Thickness between bushes 13.9 M/M. Is the after end of the liner made watertight in the

20 M/M. 15 M/M. IN ONE LENGTH.

Is an approved Oil Gland or other appliance fitted at the after end of the tube

Length of Bearing in Stern Bush next to and supporting propeller 1585 M/M.

Material M. BRONZE. Whether Moveable NO. Total Developed Surface 72. sq. feet

Is a governor or other arrangement fitted to prevent racing of the engine when detached YES. Means of lubrication

55 M/M. Are the cylinders fitted with safety valves YES. Are the exhaust pipes and silencers water cooled or lagged with

LAGGED. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine. YES FOR S.W. SYSTEM.

COOLERS:- 2 CENTRIFUGAL STEAM DRIVEN S.W. PISTONS:- 1 M.E. ROTARY. 1 STANDBY STEAM. JACKETS:- 1 M.E. ROTARY. 1 STANDBY STEAM.

ONE. ROTARY. Stroke Can one be overhauled while the other is at work

No. and Size 3. 1. M.E. ROTARY 32 T/Hr. 1. BALLAST 12 x 8 1/2 x 12 DUPLEX 100 T/Hr. 1. BILGE 6 x 6 x 6 DUPLEX 32 T/Hr.

How driven STEAM DRIVEN.

NO. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

ONE 12 x 8 1/2 x 12 DUPLEX. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 - 8 x 8 x 10 STEAM DUPLEX 50 T/Hr.

YES. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

In Pump Room 1 - 4" IN EACH.

3 - 3 1/2" DIA. In Pump Room 1 - 4" IN EACH.

FOR HOLD 2 - 2" DIA. FOR HOLD PUMP ROOM 1 - 2" DIA. FOR STORE 2 - 2" DIA. FOR COFFERDAM 1 - 4" DIA. AFT COFFERDAM 1 - 4" DIA.

TWO. (1 - 5" DIA. & 1 - 7" DIA.)

YES. Are the Bilge Suctions in the Machinery Spaces

YES.

Are they fitted with Valves or Cocks BOTH.

Are the Overboard Discharges above or below the deep water line BOTH.

Are the Blow Off Cocks fitted with a spigot and brass covering plate YES.

How are they protected

YES.

Have they been tested as per Rule YES.

Is the Shaft Tunnel watertight MCHY AFT. Is it fitted with a watertight door

worked from

ONE RUSTON HURSEBY 4 CYL 4 SCSEA 30 KW. Elec GEN. DRIVING AIR COMPRESSOR THROUGH CLUTCH.

ENG. NO. 226883 GEN. NO. 42017. COMP. NO. 85732. STAR SIDE. ENGINE ROOM.

Is a report sent herewith YES NOTTINGHAM CERT NO. C 2734.

4cy - 5 1/2 - 8" dia

003750-003762-0116

23.3.44
H.M.
Shipping approved for Tonnage

© 2020
Lloyd's Register
Foundation

AIR RECEIVERS: - Have they been made under survey ☒ YES. State No. of Report or Certificate ☒ YES.
Is each receiver which can be isolated, fitted with a safety valve as per Rule ☒ YES.
Can the internal surfaces of the receivers be examined and cleaned ☒ YES. Is a drain fitted at the lowest part of each receiver ☒ YES.
Injection Air Receivers, No. NONE. Cubic capacity of each Internal diameter thickness
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual
Starting Air Receivers, No. ONE. Total cubic capacity 500 CUB/FT. Internal diameter 5'-6 1/4" thickness 15/16"
Seamless, lap welded or riveted longitudinal joint T.R. D.B.S. Material M.S. Range of tensile strength 29/32 T/A. Working pressure by Rules 371 Actual 350
IS A DONKEY BOILER FITTED? YES TWO BOILERS If so, is a report now forwarded? YES.
Is the donkey boiler intended to be used for domestic purposes only No.
PLANS. Are approved plans forwarded herewith for Shafting 22.4.43. Receivers 1.9.43. Separate Fuel Tanks
(If not, state date of approval) 14.2.44.
Donkey Boilers General Pumping Arrangements Pumping Arrangements in Machinery Space 25.6.43
Oil Fuel Burning Arrangements 21.9.42.
SPARE GEAR.
Has the spare gear required by the Rules been supplied YES.
State the principal additional spare gear supplied As per attached lists.

The foregoing is a correct description,
For W. HAWTHORN, LESLIE & CO. LIMITED
DIRECTOR

Manufacturer.

Dates of Survey while building
During progress of work in shops - 1943 June 30, July 22, 30, Sept. 17, Oct. 8, Nov. 4, 9, 29, Dec. 6, 7, 15, 29. 1944 Jan. 10, Feb. 14, 17, 21, 25, Mar. 1, 6, 8, 11, 17, 21, 29, Apr. 7, 17, 19, 21, 29, May 5, 16, 18, 25, June 12, 14, 20, 23, July 14, 18, 19, 20, 21, 25, Aug. 11, 14, 15, 16, 18, 23, 25, 30, Sep. 5, 8, 11, 18, 25, 29, Oct. 13, 18, 19, 25, 27, Nov. 1, 9, 14, 20, 21, 22, 24, 29, Dec. 4.
During erection on board vessel -
Total No. of visits 78
Dates of Examination of principal parts - Cylinders 6-3-44 TO Covers 21-4-44. Pistons 17-3-44 TO 22-7-43 30-6-43
Crank shaft 19-4-44. Flywheel shaft 21-2-44. Thrust shaft 31-3-44. Intermediate shaft 25-7-44. Tube shaft
Screw shaft 18-7-44. Propeller 18-7-44. Stern tube 10-2-44. Engine seatings 15-8-44. Engines holding down bolts 25-10-44
Completion of fitting sea connections 21-7-44. Completion of pumping arrangements 22-11-44. Engines tried under working conditions 24-11-44
Crank shaft, Material M.S. Identification Mark No 13498 HAI. Flywheel shaft, Material M.S. Identification Mark No 12876 HAI.
Thrust shaft, Material M.S. Identification Mark No 12876 HAI. Intermediate shaft, Material M.S. Identification Mark No 8658 HAI.
Tube shaft, Material Identification Mark Screw shaft, Material M.S. Identification Mark No 8535 HAI.
Identification Marks on Air Receiver STARTING. LLOYDS TEST 550 LBS/SQ. IN. W.P. 350 LBS/SQ. IN. A.E.M. 8-8-44.

Is the flash point of the oil to be used over 150° F. YES.
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES.
Description of fire extinguishing apparatus fitted 2-10 GALL FORMITE. 7-2 GALL FORMITE. 4-FIRE GUNS. 2-60' LENGTHS FIRE HOSE.
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 DESIRED.
Is this machinery duplicate of a previous case YES. If so, state name of vessel "NEVERITA". NWC Rpt No 102268.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed and fitted on board under Special Survey, and the materials and workmanship are good.
The machinery was tried under working conditions with satisfactory results and is eligible in our opinion for the record of LMC 12.44.

The amount of Entry Fee .. £ 6 : 0 :
Special ... £ 100 : 2 :
Donkey Boiler Fee ...
STARTING AIR RECEIVER
Travelling Expenses (if any) £ 4 : 4 :
When applied for, 13 DEC 1944
When received, 19

Committee's Minute

Assigned

FRI 5 JAN 1945

+LMC 12.44 CL.
200-180 lbs.

Edmund Aulatt.

Surveyor to Lloyd's Register of Shipping



© 2020

Lloyd's Register Foundation