

REPORT ON OIL ENGINE MACHINERY.

No. 8913.

Received at London Office

Date of writing Report 11/12 1952 When handed in at Local Office 19 Port of Stockholm **15 DEC 1952**

No. in Survey held at Norrköping Date, First Survey 11.3. Last Survey 12.11. 19 52
Reg. Book. 70436 on the Single Screw vessel m.t. "NARVA" Tons Gross 1147 Net 517
Built at Norrköping By whom built AB Norrköpings Varv- & Verkstad Yard No. 138 When built 1952
Engines made at Trollhättan By whom made Nydqvist & Holm AB Engine No. 1461 When made 1952
Donkey Boilers made at Lübeck By whom made Lübecker Maschinenbau G.S. Boiler No. 1443 When made 1951
Brake Horse Power 900 Owners U.S.S.R. Port belonging to Tallin
M.N. Power as per Rule 202 $\frac{900}{5} = 180$ Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended General

OIL ENGINES, &c.—Type of Engines 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
Mean Indicated Pressure Ahead Firing Order in Cylinders Span of bearings, adjacent to the crank, measured from inner edge to inner edge Is there a bearing between each crank Revolutions per minute
Flywheel dia. Weight Moment of inertia of flywheel (lbs. in² or Kg. cm.²) Means of ignition Kind of fuel used
Crank Shaft, Solid forged dia. of journals as per Rule Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis
Semi built as fitted All built as fitted Mid. length thickness shrunk Thickness around eye-hole
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted
Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner No
Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the propeller boss
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 tube shaft Yes If so, state type Cedervall, adjustable No. 7 Length of bearing in Stern Bush next to and supporting propeller 800 mm
Propeller, dia. 2340 mm Pitch 1595 mm No. of blades 4 Material Cast steel whether moveable No Total developed surface 2.15 sq. feet
Moment of inertia of propeller (lbs. in² or Kg. cm.²) Kind of damper, if fitted None
Method of reversing Engines Compr. air Is a governor or other arrangement fitted to prevent racing of the engine when disconnected Yes Means of lubrication Forced Thickness of cylinder liners 27.5 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Cooling Water Pumps, No. 1-28.5 t/h Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Bilge Pumps worked from the Main Engines, No. 1-28.5 t/h Diameter 150 mm Stroke 120 mm Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line No. and size 1-28.5 t/h 1-40 t/h 1-27.6 t/h
How driven M.E.-driven Motor Steam
Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements
Ballast Pumps, No. and size 2-250 t/h 1-27.6 t/h Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2-265 lit/m. 1-410 lit/m.
Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both main bilge pumps
bilge pumps, No. and size:—In machinery spaces Aft C.D. 1-2 1/2" E.R. 2-2 1/2" and 2-3" In pump room 2-2"
In holds, &c. Forw. D.C. 1-2", dry cargo hold 1-2", 1-1 1/2", chain locker 1-1 1/2", forw. pump room 1-2"
Independent Power Pump Direct Suctions to the engine room bilges, No. and size 1-3"
Are all the bilge suction pipes in holds fitted with strum-boxes Yes Are the bilge suction pipes in the machinery spaces 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 Valves & cocks Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates No 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
That pipes pass through the bunkers How are they protected
That 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 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 None Is it fitted with a watertight door worked from
If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
STARTING
Main Air Compressors, No. 1 No. of stages 2 diameters 85/210 mm stroke 250 mm driven by M.E.
Auxiliary Air Compressors, No. 1 No. of stages 2 diameters 40/95 mm stroke 165 mm driven by Motor
Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
What provision is made for first charging the air receivers Aux. air compr. motive power from hand started harbour lighting set.
Scavenging Air Pumps, No. 1 (D.A.) crank type diameter 735 mm stroke 580 mm driven by M.E.
Auxiliary Engines crank shafts, diameter as per Rule No. 3
 as fitted 84 mm and 76.2 mm Position 2 on port, 1 on starboard side in E.R.
Have the auxiliary engines been constructed under special survey Yes Is a report sent herewith No (cert. enclosed)

1-1-53

24 00-90210-76110

150

© 2021 Lloyd's Register

AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....

Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....

Can the internal surfaces of the receivers be examined and cleaned.....

Is a drain fitted at the lowest part of each receiver.....

Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness..... by Rules.....

Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure..... Actual.....

Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness..... by Rules.....

Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure..... Actual.....

IS A DONKEY BOILER FITTED Yes If so, is a report now forwarded Yes

Is the donkey boiler intended to be used for domestic purposes only No (Heating coils, cargo oil- & bilge pumps, and windlass).

PLANS. Are approved plans forwarded herewith for shafting No Receivers No Separate fuel tanks No

Donkey boilers No General pumping arrangements No 15.12.49 Pumping arrangements in machinery space No 15.12.49

Oil fuel burning arrangements No

Have Torsional Vibration characteristics been approved Yes Date of approval.....

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.....

AB. Norrköpings Varv & Verkstad

Ship-builder
Manufacturer

Dates of Survey while building During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits.....

Dates of examination of principal parts—Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts 20.6.50 Tube shaft.....

Screw shaft 20.6.50 Propeller 27.6.51 Stern tube 26.5.50 Engine seatings 12.5.52 Engine holding down bolts 30.7.52

Completion of fitting sea connections 30.7.52 Completion of pumping arrangements 24.9.52 Engines tried under working conditions 25.9.52 & 13.11.52

Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark..... No. 1091

Thrust shaft, material..... Identification mark..... Intermediate shafts, material El. steel Identification marks A.S. 20.6.52

Tube shaft, material..... Identification mark..... Screw shaft, material El. steel Identification mark A.S. 20.6.50

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

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 appli- 3-6 lit. in E.R., 3 in acc. 5 on deck, Steam smothering at donkey boiler. Chemic

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 Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel m.t. "ISHIM", "IRTISH" and "SUNGARI"

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

The machinery has been fitted onboard under my inspection and to my satisfaction and the workmanship

is good. The engine has been tested during four trial trips and found satisfactory.

The machinery of this vessel is eligible, in my opinion, to be classed in the Register Book, with the

notation of +LMC 10.52 and OG, subject to the engine not being run continuously between 98-118 R.P.M., (a noticeboard

to this effect has been fitted at the controls).

Certificates in respect of shafts, propellers, pumps and auxiliary engines are attached.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

The amount of Entry Fee ... £ :
Special 1/3 ... Kr. 490:--
Donkey Boiler Fee... £ :
Travelling Expenses (if any) Kr. 481:60

When applied for 1/2 1952
When received 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+LMC 11.52 Oil Eng.

OG DB 1781/5 (with torsional endorsement)



© 2021

Lloyd's Register
Foundation