

REPORT ON OIL ENGINE MACHINERY.

No. 1060

25 JUN 1954

Received at London Office

Writing Report 22nd June 1954 When handed in at Local Office 22nd June 1954 Port of Kiel

Survey held at Kiel Date, First Survey 9.4.54 Last Survey 15.6. 1954
Number of Visits 26

Single Screw vessel M.S. "K.J. Knudsen Tons Gross 11199
Net 6816
Gothenburg By whom built A/B Götaverken Yard No. When built launched 1939
comm. 1945

made at Copenhagen By whom made Burmeister and Wain Engine No. 5220 When made 1954

Boilers made at Gothenburg By whom made A/B Götaverken Boiler No. When made 1954

Horse Power Maximum -- Service 6500 Owners D/S A/S Lisbeth Port belonging to Haugesund
per Rule 1300 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

for which vessel is intended
Engines, &c. Type of Engines B+W type 575 VFT 170/60 2 or 4 stroke cycle 2 Single or double acting SA

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Indicated Pressure Span of bearings (i.e., distance between inner edges of bearings in

crank) Is there a bearing between each crank Revolutions per minute Maximum Service

Weight Moment of inertia of flywheel (lbs. in² or Kg. cm²) Means of ignition Kind of fuel used

SEE "COPENHAGEN RPT." balance wts. (" " " ")

Solid forged dia. of journals as per Rule Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis
shrunken Mid. length thickness Thickness around eyehole

Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
as fitted 470mm as fitted 500mm

Shaft, diameter as per Rule Screw Shaft, diameter as per Rule existing Is the screw shaft fitted with a continuous liner yes
as fitted

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
as fitted

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner --

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-
-- If two liners are fitted, is the shaft lapped or protected between the liners. -- Is an approved Oil Gland fitted at the after

stern tube -- If so, state type -- Length of bearing in Stern Bush next to and supporting propeller --

dia. existing No. of blades -- Material -- whether moveable -- Total developed surface -- sq. feet

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²) -- Kind of damper, if fitted --

of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine yes Means of
forced Thickness of cylinder liners -- Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers packed

with non-conducting material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
the engine -- Cooling Water Pumps, No. and how driven 4 E.D. pumps Working F.W. 1 E.D.

Spare F.W. 1 S.W. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Pumps worked from the Main Engines, No. and capacity none Can one be overhauled while the other is at work --

connected to the Main Bilge Line No. and capacity of each -- How driven --

Drinking water led to the bilges -- If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
arrangements

Pumps, No. and capacity -- Power Driven Lubricating Oil Pumps, including spare pump, No. and size Existing pumps used
Independent means arranged for circulating water through the Oil Cooler Branch Bilge Suctions

Size: -- In machinery spaces -- In pump room --

&c. --

Bilge Suctions to the engine room bilges, No. and size --

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes -- Are the bilge suction in the machinery spaces led from easily
mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. --

Connections fitted direct on the skin of the Ship -- Are they fitted with valves or cocks -- Are they fixed
high on the ship's side to be seen without lifting the platform plates -- Are the overboard discharges above or below the deep water line

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
as pass through the bunkers -- How are they protected --

as pass through the deep tanks -- Have they been tested as per Rule --

Are the cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times --

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
from one compartment to another -- Is the shaft tunnel watertight -- Is it fitted with a watertight door -- worked from --

essel, what means are arranged to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork --

Compressors, No. -- No. of stages -- diameters -- stroke -- driven by --

Air Compressors, No. -- No. of stages -- diameters -- stroke -- driven by --

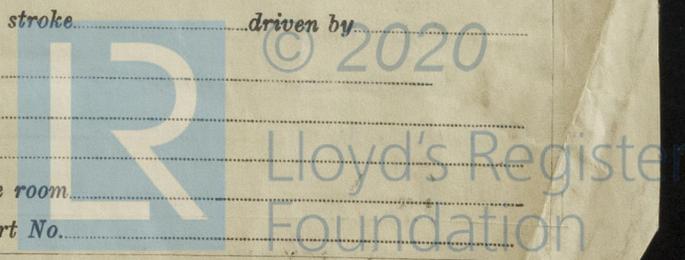
Utility Air Compressors, No. -- No. of stages -- diameters -- stroke -- driven by --

Provision is made for first charging the air receivers. --

Air Pumps or Blowers, No. -- How driven --

Engines Have they been made under survey -- Engine Nos. -- Makers name -- Position of each in engine room -- Report No. --

NO ALTERATIONS MADE TO THE PUMPS AND CONNECTIONS



003525-003532-0327

AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....
 State full details of safety devices.....
 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.....
 Seamless, welded or riveted longitudinal joint..... Range of tensile strength..... Working pressure.....
 Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....
 Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

IS A DONKEY BOILER FITTED..... If so, is a report now forwarded.....
 Is the donkey boiler intended to be used for domestic purposes only.....
PLANS. Are approved plans forwarded herewith for shafting no. 15.4.52 Receivers -- Separate fuel tank --
 (If not, state date of approval)
 Donkey boilers -- General pumping arrangements -- Pumping arrangements in machinery space --
 Oil fuel burning arrangements --
 Have Torsional Vibration characteristics been approved yes Date and particulars of approval 22.10.53 Engine not to be continuously between 64 and 76 rpm

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes State if for "short voyages" only Ocean going
 State the principal additional spare gear supplied --

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops --
 During erection on board vessel April 9, 13, 14, 20, 21, 23, 24, 26, 28, May 3, 7, 12, 14, 17, 19, 20, 24, 25, 26, 28, 29, June 14, 15-1954
 Total No. of visits 26

Dates of examination of principal parts—Cylinders -- Covers -- Pistons -- Rods -- Connecting rods --
 Crank shaft 17.5.54 Flywheel shaft -- Thrust shaft 19.5.54 Intermediate shafts 19.5.54 Tube shaft --
 Screw shaft 24.4.54 Propeller 24.4.54 Stern tube 24.4.54 Engine seatings 7.5.54 Engine holding down bolts 20.4.54
 Completion of fitting sea connections -- Completion of pumping arrangements -- Engines tried under working conditions 14.5.54
 Crank shaft, material -- Identification mark -- Flywheel shaft, material, -- Identification mark --
 Thrust shaft, material Lloyd's 2393 K.H. 9.2.54 Identification mark -- Intermediate shaft, material SM-Steel Identification marks --
 Tube shaft, material -- Identification mark -- Screw shaft, material SM Steel Identification mark 9.3.54
 Identification marks on air receivers --

Welded receivers, state Makers' Name --
 Is the flash point of the oil to be used over 150°F --
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with --
 Full description of fire extinguishing apparatus fitted in machinery spaces --
 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 --
 What is the special notation desired --
 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 -- If so, state name of vessel --

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c. This main engine built under survey by Copenhagen Certif. No. 580 (Report 4b not yet received) has been satisfactorily installed in this vessel in accordance with the Rules and the Secretary's letters. The machinery was examined under full power and found in order.
 The vessel is eligible in my opinion to have the notation of *NE. 6.54.
 Note:— A notice board has been fitted at the control station, stating that the engine is not to be operated continuously between 64 and 76 rpm. & The engine tachometer is marked accordingly.
 Torsiographs records were taken during sea trials and copies will be forwarded by the Makers in due course
 — ALL ENG. LTR. 12/8/54

The amount of Entry Fee ... See Rpt. 9 :
 Special ... £ :
 Donkey Boiler Fee... £ :
 Travelling Expenses (if any) £ :
 When applied for 10
 When received 10
 For E. Schamber
 N. Chambers
 Engineer Surveyor to Lloyd's Register of Shipping
 © 2020
 TUESDAY 24 AUG 1954
 See rpt-9
 Assigned



Certificates (if required) to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.