

Received at London Office

Date of writing Report 2nd Dec. 1952 When handed in at Local Office 12th Dec. 1952 Port of Gothenburg

No. in Survey held at Gothenburg Date, First Survey 24th March, 52 Last Survey 28th Nov. 1952
Reg. Book. 90803 Single on the Tank Triple Quadruple Screw vessel Motor Tanker "K A R E N M A E R S K" Tons Gross 11756 Net 6852

Built at Gothenburg By whom built Eriksbergs Mek. Verkstads Aktiebolag Yard No. 429 When built 1952
Engines made at Gothenburg By whom made Eriksbergs Mek. Verkstads Aktiebolag Engine No. 566 When made 1952
Main Boilers made at Karlskrona By whom made Eriksbergs Mek. Verkstads Aktiebolag Boiler No. 107-08 910-11 When made 1952
Service and max. Horse Power 7250 Owners A/S D/S Svendborg & D/S af 1912 A/S Port belonging to Copenhagen
V. Power as per Rule 1445, New 1450 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Use for which vessel is intended General

ENGINES, &c.—Type of Engines 1 heavy oil engine 2 or 4 stroke cycle 2 Single or double acting SA
Maximum pressure in cylinders 49 kg/cm² Diameter of cylinders 740 Length of stroke 1400 No. of cylinders 9 No. of cranks 9
Mean Indicated Pressure 6.5 kgs/cm² Ahead Firing Order in Cylinders 1-8-3-6-5-4-7-2-9 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 948 mm. Is there a bearing between each crank Yes Service and max. 115
Flywheel dia. 1975 Weight 2500 kgs Moment of inertia of flywheel (kgm²) 5260 Means of ignition Compr. Kind of fuel used Diesel
Crankshaft, Solid forged Appd. dia. of journals 520 mm. Crank pin dia. 520 mm. Crank webs Mid. length breadth shrunk Thickness parallel to axis 270
All built with 185mm centerhole. with 185mm centerhole. Mid. length thickness 295
Thrust Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Appd. 410 mm. Thrust Shaft, diameter at collar as fitted 500 mm.
Propeller Shaft, diameter as per Rule as fitted Appd. 467 mm. Is the screw shaft fitted with a continuous liner Yes
Liner Liners, thickness in way of bushes as per Rule 22 mm. Thickness between bushes as fitted 22 mm. Is the after end of the liner made watertight in the 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 One length
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 No If so, state type Length of bearing in Stern Bush next to and supporting propeller 2100 mm.
Propeller, dia. 5500 Pitch 4150 No. of blades 4 Material Bronze whether moveable No Total developed surface 11.3 m²
Moment of inertia of propeller (kgm²) 69300 Kind of damper, if fitted None fitted
Method of reversing Engines Compr. air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced Thickness of cylinder liners 52 mm. Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled 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 led to funnel 2 SW 4670.1/m. 2 FW 4170 1/m.
Cooling Water Pumps, No. 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 Diameter 150 mm Stroke 200 mm Can one be overhauled while the other is at work —
Pumps connected to the Main Bilge Line {No. and size 1 Ballast pump 150 t/h. 1 bilge pump 40 t/h. 1 bilge pump 20 tons/hour
How driven El. driven Steam driven Main engine
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 1 x 150 M³/hour Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 x 315 M³/hour
Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both main bilge pumps and auxiliary pumps, No. and size:—In machinery spaces 3 x 4", 2 x 2½" from crank pit aft & forward In pump room 2 x 4"
~~Forward~~ Fwd pumproom 1 x 2½", 2 x 2½" from cargo holds
Independent Power Pump Direct Suctions to the engine room bilges, No. and size 2 x 4" to bilge pump, 1 x 6" to ballast pump
Are all the bilge suction pipes in holds well fitted with strum-boxes Yes Are the bilge suction 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 Also on tank top Are they fitted with valves or cocks Both Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Not all 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
Do pipes pass through the bunkers No coal bunkers How are they protected
Do pipes pass through the deep tanks Bilge pipes from cofferdam 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 No tunnel Is it fitted with a watertight door worked from
Is the wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Air Compressors, No. None No. of stages diameters stroke driven by
Auxiliary Air Compressors, No. Two No. of stages 2 diameters 11.1/4"-4¾" stroke 8" driven by El. driven
Small Auxiliary Air Comprossors, No. One No. of stages 2 diameters 3.3/4"-1½" stroke 3-1/4" driven by Steam drive
What provision is made for first charging the air receivers The above steam driven compressor
Savenging Air Pumps, No. 2 diameter Rotary type stroke driven by Main engine
Auxiliary Engines crank shafts, diameter Appd. Crank pins 170mm.Cr.journal 170 mm. No. Two Position Port side for and aft engine room floor
Have the auxiliary engines been constructed under special survey Yes Is a report sent herewith Yes
Harbour light set also fitted pos: on a platform Port side eng.room.

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AIR RECEIVERS:—Have they been made under survey. Yes ✓ State No. of receivers 2496 - 97
Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes. 32 mm. spring loaded
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, welded or riveted longitudinal joint. --- Material. --- Range of tensile strength. --- Working pressure Actual. ---
Starting Air Receivers, No. 2 ✓ Total cubic capacity. 2 x 11.5 M³ Internal diameter. 1800 mm. thickness. 27 mm.
Seamless, welded or riveted longitudinal joint. El. welded Material. S.M.Steel Range of tensile strength. 41-55 kgs/mm² Working pressure Actual. 25.0 kg/cm²
IS A DONKEY BOILER FITTED Yes ✓ If so, is a report now forwarded. Yes. Also Malmö report No. 3134.
Is the donkey boiler intended to be used for domestic purposes only. No
PLANS. Are approved plans forwarded herewith for shafting London 21.8.1951 Receivers London 21.9.50 Separate fuel tanks 2.9.51
(If not, state date of approval)
Donkey boilers. 12.2.1951 General pumping arrangements. 14.2.1952 Pumping arrangements in machinery space. 14.2.1952
Oil fuel burning arrangements. 7.3.1952
Have Torsional Vibration characteristics been approved. Yes Date of approval. 14.8.1951
SPARE GEAR.
Has the spare gear required by the Rules been supplied. Yes ✓
State the principal additional spare gear supplied. One propellershaft, 2 cyl.covers, 2 cyl. liner, 3 pistons, 1 piston rod, 9 exhaust valves, 2 starting valves, 18 fuel inj. valves.
The foregoing is a correct description and particulars of the installation as fitted are as approved for torsional vibration characteristics.

ERIKSBERGS MEK. VERKSTADS A-B.

Manufacturer.

Dates of Survey while building
During progress of work in shops - - 24.3.1952 - 3.10.1952
During erection on board vessel - - 11.10.1952 - 28.11.1952.
Total No. of visits. 63.
Dates of examination of principal parts—Cylinders 11,13/9-52 Covers 10,17/6-52 Pistons 10,23/9-52 Rods 1,4/9-52 Connecting rods 30/7-52
Crank shaft 21.2.52 Flywheel shaft --- Thrust shaft 21.2.52 Intermediate shafts 24.9.52 Tube shaft ---
Screw shaft 17.9.52 Propeller 17.9.52 Stern tube 19.6.52 Engine seatings --- Engine holding down bolts 18.10.52
Completion of fitting sea connections. 15.9.52 Completion of pumping arrangements. 25.11.52 Engines tried under working conditions. 3.10.52.
Crank shaft, material. S.M. Steel Identification mark. LL 1007-8 Flywheel shaft, material. --- Identification mark. ---
Thrust shaft, material. S.M. Steel Identification mark. SB 21.2.52. Intermediate shafts, material. S.M. Steel Identification mark. LL No. 9019
Tube shaft, material. --- Identification mark. --- Screw shaft, material. S.M. Steel Identification mark. BJ 24.9.52.
Identification marks on air receivers. Nos 2496-97 Lloyd's No. 8784
LLOYD'S TEST 41 Kgs GU 29.9.52
WP 25 Kgs
28.7.52. GU
Welded receivers, state Makers' Name. Eriksbergs Mek. Verkstads Aktiebolag, Gothenburg
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. 7 foam fire ext. apparatus, 1 CO₂. Steam under D B and E R platform, also "Ellehammer foam fire ext. system"
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. Oil tanker ✓ 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, Speed restrictions, &c.) The main and auxiliary engines of this vessel have been constructed under Special Survey in accordance with the Rules and approved plans. The workmanship and material is good and test sheets in respect of the shafting and the air receivers attached. The machinery has been securely fitted in the vessel under my inspection and to my satisfaction and has been tested under full power conditions on a trial trip and found in order. All pumps for essential services have been examined and tested in accordance with the Rules. A Spare Swirlflo Exhaust Gas Economiser, made by Messrs. AB Lindholmens Varv, Gothenburg, as per Gothenburg First Entry Report No. 18761, has been fitted onboard and its safety valves adjusted to 180 lbs/in². This economiser works as a heater in conjunction with the oil fired boilers.

Spec. Survey
The amount of Survey Fee ... Kr. 6330:00
E.W. of bad plate etc. ... Kr. 475:00
Air receiver ... Kr. 330:00
Travelling Expenses (if any) £
When applied for 12th Dec. 19 52.
When received 19 --

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation