

Rpt. 4b

## REPORT ON OIL ENGINE MACHINERY.

No. 3225

Received at London Office

11 APR 1930

Date of writing Report 8 April 1930 When handed in at Local Office

Port of Stockholm

Date, First Survey 12 Dec. 1929 Last Survey 4 April 1930

No. in Survey held at  
Reg. Book.

Sickla, Gen. Dist.

Number of Visits 6

Single  
on the Twin  
Triple  
Quadruple

Screw vessel

m.v. "KIM"

Tons { Gross 6074  
Net 3575

Built at \_\_\_\_\_ By whom built \_\_\_\_\_ Yard No. \_\_\_\_\_ When built \_\_\_\_\_  
Engines made at Stockholm By whom made Aktiel. Atlas Diesel Engine No. 80361 When made 1930.  
Donkey Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ Boiler No. \_\_\_\_\_ When made \_\_\_\_\_  
Brake Horse Power 50 Owners Aktiel. Atlas Diesel Port belonging to London  
Nom. Horse Power as per Rule 23 Is Refrigerating Machinery fitted for cargo purposes \_\_\_\_\_ Is Electric Light fitted \_\_\_\_\_  
Trade for which vessel is intended \_\_\_\_\_

**OIL ENGINES, &c.**—Type of Engines Stationary Diesel Oil Engine (type 1429) 2 or 4 stroke cycle Single or double acting  
Maximum pressure in cylinders 35 kg/cm<sup>2</sup> Diameter of cylinders 290 mm. Length of stroke 410 mm No. of cylinders 1 No. of cranks 1  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 454 mm. Is there a bearing between each crank \_\_\_\_\_  
Revolutions per minute 275 Flywheel dia. 1400 mm Weight 1185 kg. Means of ignition Compression Kind of fuel used Prude oil  
Crank Shaft, dia. of journals as per Rule 164 mm Crank pin dia. 165 mm. Crank Webs Mid. length breadth 220 mm. Thickness parallel to axis shrunk Thickness around eyehole  
Flywheel Shaft, diameter as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted  
Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the { tube } shaft fitted with a continuous liner {  
Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule 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 the tube shaft \_\_\_\_\_ 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  
Method of reversing Engines \_\_\_\_\_ Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication  
pumps Thickness of cylinder liners none fitted Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material \_\_\_\_\_ 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 Is the sea suction provided with an efficient strainer which can be cleared within the vessel \_\_\_\_\_  
Bilge Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
Pumps connected to the Main Bilge Line { No. and Size \_\_\_\_\_  
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, No. and size:—In Machinery Spaces \_\_\_\_\_  
In Holds, &c. \_\_\_\_\_  
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size \_\_\_\_\_ Are the Bilge Suctions in the Machinery Spaces  
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes \_\_\_\_\_ Are they fitted with Valves or Cocks \_\_\_\_\_  
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 platform 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 \_\_\_\_\_  
If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork \_\_\_\_\_  
Main Air Compressors, No. none fitted No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Auxiliary Air Compressors, No. \_\_\_\_\_ No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Small Auxiliary Air Compressors, No. \_\_\_\_\_ No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Scavenging Air Pumps, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
Auxiliary Engines crank shafts, diameter as per Rule as fitted

**AIR RECEIVERS:**—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 Yes What means are provided for cleaning their inner surfaces mudhole 120 mm.

Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. none fitted solid machine Internal diameter \_\_\_\_\_ thickness \_\_\_\_\_

Seamless, lap welded or riveted longitudinal joint \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_

Starting Air Receivers, No. 1 Total cubic capacity 100 litres Internal diameter 340 mm thickness 15 mm

Seamless, lap welded or riveted longitudinal joint lap welded Material S. M. Steel Range of tensile strength 38 kg/cm<sup>2</sup> Working pressure by Rules 57 kg/cm<sup>2</sup>



## IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *E. 27.4.25*  
(If not, state date of approval)Receivers *25.10.26*

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR *as per list approved on the 4th Febr. 1926. will be inspected when machinery is being fitted in ship.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - -

Total No. of visits

*5/2.29, 17/1, 19/2, 22/3, 12/4 1930.**in shop 6.*

Dates of Examination of principal parts—Cylinders *with* Covers *22 1/4 30* Pistons *1/4 30* Rods *1 1/2 1 1/2 1 1/2* Connecting rods *1 1/2 1 1/2 1 1/2*

Crank shaft *5-29 17 1/2 1 1/2 1 1/2 1 1/2* Flywheel shaft Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions *in shop 22 1/2 1 1/2 1 1/2*

Crank shaft, Material *S. N. Steel* Identification Mark *LLOYD N:05849 AT. 19.2.30* Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F. ☒Is this machinery duplicate of a previous case *yes* If so, state name of vessel *see Gen. report no. 3219.*

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

*I am of opinion that this engine is of superior material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit that it be approved as auxiliary to a classed main engine.*

*This Engine has been fitted on board the M.V. "KIM".*

*L. Desmet.*

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ... £ : When applied for, 8.4. 1930

Special ... *218.40* : When received, 30.6. 1930

Donkey Boiler Fee ... £ : 30.6. 1930

Travelling Expenses (if any) £ *28.-* : 30.6. 1930

Total *246.40*

Committee's Minute

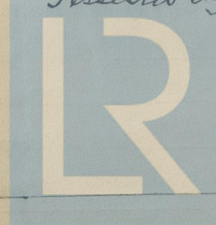
TUE. 2 SEP 1930

Assigned

*See F. E. Rpt.*

*A. Bakson*

Engineer Surveyor to Lloyd's Register of Shipping.  
Assisted by Mr. K. J. Andersson



Lloyd's Register  
Foundation