

# AUXILIARY REPORT ON OIL ENGINE MACHINERY.

No. 2295

Received at London Office 12 JUL 1926

of writing Report 20<sup>th</sup> June 1926 When handed in at Local Office 19 Port of Copenhagen Date, First Survey 15/16 25. Last Survey 19/6 1926. Number of Visits 21.

in Survey held at Helsingør & Esbener Date, First Survey 15/16 25. Last Survey 19/6 1926. Book. on the Single } MOTOR 'JYLLAND' } Twin } Screw vessel } Triple } Quadruple }

uilt at Esbener By whom built Helsingørsk Jernskibsselskab Yard No. 176 When built 1926. gines made at Helsingør By whom made Helsingørsk Jernskibsselskab Engines No. 206-7-8 When made 1926. nkey Boilers made at Esbener By whom made Helsingørsk Jernskibsselskab Boiler No. 710 When made 1926. ake Horse Power 2900 Owners Det Forenede Dampskibs Selskab Port belonging to Esbjerg

m. Horse Power as per Rule 545 Is Refrigerating Machinery fitted for cargo purposes yes. Is Electric Light fitted yes. ade for which vessel is intended Carrying Passengers & Agricultural Produce between Esbjerg and Parkenton.

ENGINES, &c.—Type of Engines Vertical Diesel oil engines, trunk type 2 or 4 stroke cycle 4 Single or double acting single Maximum pressure in cylinders 35 kg/cm<sup>2</sup> Diameter of cylinders 310 mm. Length of stroke 350 mm. No. of cylinders 3 No. of cranks 3 No. of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 mm. Is there a bearing between each crank yes. olutions per minute 400 Flywheel dia. 1440 mm. Weight 3315 kg. Means of ignition compression Kind of fuel used Diesel Oil, F.R. 40/50

ank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth shrunk Mid. length thickness Thickness parallel to axis Thickness around eye-hole wheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

be Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner? pelter boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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. 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 of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

opeller, 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 Means of lubrication Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with

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. olving Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

lge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work mps connected to the Main Bilge Line No. and Size How driven Lubricating Oil Pumps, including Spare Pump, No. and size

llast Pumps, No. and size e two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge mps, No. and size:—In Machinery Spaces

Holds, &c. ependent 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 the Bilge Suctions in the Machinery Spaces from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. Are they fitted with Valves or Cocks.

Are all Sea Connections fitted direct on the skin of the ship. Are the Overboard Discharges above or below the deep water line. Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates. Are the Blow Off Cocks fitted with a spigot and brass covering plate.

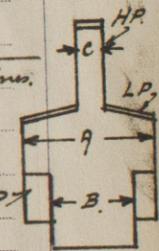
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel. How are they protected. Are the Blow Off Cocks fitted with a spigot and brass covering plate. That pipes pass through the bulkheads. Have they been tested as per Rule.

That pipes pass through the deep tanks. Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times. 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.

Is a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork. ain Air Compressors, No. No. of stages Diameters Stroke Driven by Auxiliary Air Compressors, No. 3 No. of stages 3 Diameters 318-285-76 mm. Stroke 220 mm. Driven by Auxil. Diesel engines. 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 161.5 mm. 162 mm. R RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule. Yes. What means are provided for cleaning their inner surfaces. Arrangement made for cleaning with injection air hoses.

Are the internal surfaces of the receivers be examined. Yes. Is there a drain arrangement fitted at the lowest part of each receiver. Yes. High Pressure Air Receivers, No. 3 Cubic capacity of each 30 P. luss. Internal diameter 7 1/2" thickness 3/8" Seamless, lap welded or riveted longitudinal joint seamless. Material S.M. steel. Range of tensile strength 29.6-30.6 t. Working pressure by Rules 1360 lbs. Starting Air Receivers, No. Total cubic capacity Internal diameter thickness Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules



IS A DONKEY BOILER FITTED? *Yes* If so, is a report now forwarded? *Yes*  
 PLANS. Are approved plans forwarded herewith for Shafting *Yes* Receivers  Separate Tanks *Yes*  
(If not, state date of approval)  
 Donkey Boilers *Yes* General Pumping Arrangements *Yes* Oil Fuel Burning Arrangements

SPARE GEAR *Plans on accompanying list.*

The foregoing is a correct description,  
 AKTIESELSKABET  
 HOLEBY DIESELMOTOR FABRIK  
*W. Kaizer* Manufacturer.

Dates of Survey while building  
 During progress of work in shops - *15/10. 19/10. 27/10. 9/11. 17/11. 20/11. 27/11. 1925. 13/1. 30/1. 3/3. 11/3. 27/3 1926.*  
 During erection on board vessel - *16/4. 19/4. 26/4. 8/5. 22/5. 3/6. 15/6. 17/6. 19/6 1926.*  
 Total No. of visits *21.*

Dates of Examination of principal parts - Cylinders *13/1. 30/1* Covers  Pistons *13/1* Rods  Connecting rods *15/10. 27/10. 9/11. 20/11.*  
 Crank shafts *9/11. 17/11. 20/11. 27/11. 13/1* Flywheel shaft  Thrust shaft  Intermediate shafts  Tube shaft   
 Screw shaft  Propeller  Stern tube  Engine seatings *26/1. 5/2* Engines holding down bolts *16/4. 26/4*  
 Completion of fitting sea connections  Completion of pumping arrangements  Engines tried under working conditions *27/3. 17/6. 19/6.*

Crank shaft, Material *S. M. steel.* Identification Mark *Lloyds No 7849-52-61* 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. *Yes.*  
 Is this machinery duplicate of a previous case *No.* If so, state name of vessel *M/S "PARKESTON."*

General Remarks (State quality of workmanship, opinions as to class, &c.)  
*The 3 auxiliary Diesel oil engines as above described have been built under Special Survey and in accordance with the Rules, the approved plans and the requirements contained in the Secretary's letter 3 dated*  
*The material used in the construction has been examined and tested as required by the Rules and the workmanship is good.*  
*The engines have been fitted on board under our supervision and were on completion tested under full power working conditions and found to work satisfactorily.*

The amount of Entry Fee ... £	When applied for,
Special <i>300.00</i>	<i>17/5 1926</i>
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) <i>235.00</i>	<i>20/5 1926</i>

*A. J. P. ...*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI 16 JUL 1926*  
 Assigned *See P.B. rpt attached*



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

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 No. in Survey Reg. Book.  
 on the  
 built at  
 Engines made at  
 Boilers made at  
 Owners  
 VERTICAL  
 Made at  
 Manufacturers of  
 Total Heating S  
 No. and Descrip  
 Tested by hydra  
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 Combustion  
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 Distance ap