

# REPORT ON OIL ENGINE MACHINERY.

No. 17819

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Rotterdam

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Rotterdam

Date, First Survey 30.7.1927 Last Survey 19-9-1928

Number of Visits 61

on the <sup>Single</sup> ~~Triple~~ ~~Quadruple~~ Screw vessel

## "KOTA CEDE"

Tons { Gross 4227 Net 4114

Built at Rotterdam By whom built *My. Feyenwood* Yard No. 309 When built 1928  
 Engines made at Rotterdam By whom made *My. Feyenwood* Engine No. 549 When made 1928  
 Donkey Boilers made at *Hutchin* By whom made *Elbing Spencer Hopwood* Boiler No. 7179 When made 1928  
 Brake Horse Power 5000 Owners *Elbing Rotterdamse Lloyd* Port belonging to Rotterdam  
 Nom. Horse Power as per Rule 1854 Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*  
 Trade for which vessel is intended *Dutch East Indies*

**L ENGINES, &c.**—Type of Engines *Diesel Oil Engine* 2 or 4 stroke cycle *2* Single or double acting *Double*  
 Maximum pressure in cylinders *35 kg* Diameter of cylinders *700 mm* Length of stroke *1200 mm* No. of cylinders *4* No. of cranks *4*  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *1090 mm* Is there a bearing between each crank *Yes*  
 Revolutions per minute *90* Flywheel dia. *4260 mm* Weight *4700 kg* Means of ignition *Corymba* Kind of fuel used *Diesel Oil*  
 Crank Shaft, dia. of journals as <sup>appx</sup> *500 mm* Crank pin dia. *500 mm* Crank Webs Mid. length breadth *785 mm* Thickness parallel to axis *✓*  
 as fitted *500 mm* Mid. length thickness *320 mm* Thickness around eye-hole *2.15 mm*  
 Flywheel Shaft, diameter as <sup>appx</sup> *500 mm* Intermediate Shafts, diameter as <sup>appx</sup> *430 mm* Thrust Shaft, diameter at collars as <sup>appx</sup> *455 mm*  
 as fitted *500 mm* as fitted *460 mm* as fitted *455 mm*  
 Tube Shaft, diameter as per Rule *✓* Screw Shaft, diameter as <sup>appx</sup> *490 mm* Is the <sup>tubo</sup> screw shaft fitted with a continuous liner *✓ No*  
 as fitted *✓* as fitted *490 mm*

Bronze 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 propeller boss *Oil gland*  
 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 lightly 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 *Yes*  
 Length of Bearing in Stern Bush next to and supporting propeller *1900 mm*

Propeller, dia. *5490 mm* Pitch *5350* No. of blades *4* Material *Brone* whether Moveable *No* Total Developed Surface *✓* sq. feet  
 Method of reversing Engines *Camshaft* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes* Means of lubrication *Forged*  
 Thickness of cylinder liners *✓* Are the cylinders fitted with safety valves *Yes* Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *Yes*  
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine *Tunnel*  
 Cooling Water Pumps, No. *3* 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. *✓* Diameter *✓* Stroke *✓* Can one be overhauled while the other is at work *✓*  
 Pumps connected to the Main Bilge Line { No. and Size *2. 1 à 250 cb<sup>3</sup> per hour. 1 à 40 cb<sup>3</sup> per hour (see letter 28-11-27)*  
 How driven *Electric*  
 Ballast Pumps, No. and size *1 à 250 cb<sup>3</sup> per hour* Lubricating Oil Pumps, including Spare Pump, No. and size *2 à 500 cb<sup>3</sup> per hour*  
 Are two independent means arranged for circulating water through the Oil Cooler *Yes* Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces *5 à 90 mm, 1 in tunnel à 90 mm*

Holds, &c. *2 in No. 1 à 90 mm, 2 in fore-deck tank à 90 mm, 1 in after-deck tank à 90 mm, 1 in after-deck tank à 90 mm, 1 in after-deck tank à 90 mm*  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *One à 120 mm*  
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes *Yes* Are the Bilge Suctions in the Machinery Spaces *✓*  
 and 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 *Both*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates *Yes* 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*  
 What pipes pass through the bunkers *None* How are they protected *✓*  
 What pipes pass through the deep tanks *None* 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 *Yes* Is it fitted with a watertight door *Yes* worked from *Upper platform*

For 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. *1* No. of stages *3* Diameters *110 x (606-875) x (600-210)* Stroke *650 mm* Driven by *Main Engine*  
 Auxiliary Air Compressors, No. *2* No. of stages *3* Diameters *74 x (322-282) x (225-247)* Stroke *100 mm* Driven by *Elec. Motor*  
 Small Auxiliary Air Compressors, No. *1* No. of stages *3* Diameters *26 x (10-100) x (10-12)* Stroke *80 mm* Driven by *Perm. Motor*  
 Scavenging Air Pumps, No. *2* *Tandem* Diameter *1160 & 1140 mm* Stroke *1100 mm* Driven by *Main Engine*  
 Auxiliary Engines crank shafts, diameter as <sup>appx</sup> *269.9 mm* as fitted *269.9 mm*

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

High Pressure Air Receivers, No. *5 & 1* Cubic capacity of each *2750 liters* Internal diameter *58 à 475 mm* thickness *57.5 mm*  
 Seamless, lap welded or riveted longitudinal joint *Solid drawn* Material *S. M. Steel* Range of tensile strength *50-54 kg/cm<sup>2</sup>* Working pressure by Rules *12.4 kg/cm<sup>2</sup>*  
 Starting Air Receivers, No. *1* Total cubic capacity *16.37 cb<sup>3</sup>* Internal diameter *1900 mm* thickness *26 mm*  
 Seamless, lap welded or riveted longitudinal joint *Riveted* Material *S. M. Steel* Range of tensile strength *44-50 kg/cm<sup>2</sup>* Working pressure by Rules *25.6 kg/cm<sup>2</sup>*

