

Completion of Amsterdam Rpt 46 No. 18786
REPORT ON OIL ENGINE MACHINERY.

No. **19991**

Port of writing Report **Aug 12 1953** When handed in at Local Office **AMSTERDAM** Received at London Office **25 SEP 1953**
 Survey held at **Spaarndam** Date, First Survey **January 30** Last Survey **Aug 11 1953**
 Book. **BOGA** Number of Visits **7**
 Single on the Twin Triple Quadruple Screw vessel **BOGA** Tons Gross **195** Net **195**
 Built at **Spaarndam** By whom built **Scheepswaf Stapel** Yard No. **26** When built **1953**
 Lines made at **AMSTERDAM** By whom made **Werkspaan N.V.** Engine No. **1461** When made **1953**
 Key Boilers made at **Spaarndam** By whom made **Werkspaan N.V.** Boiler No. **1461** When made **1953**
 Horse Power **430** Owners **Republic Indonesia** Port belonging to **Djakarta**
 Power as per Rule **86** Is Refrigerating Machinery fitted for cargo purposes **NO** Is Electric Light fitted **yes**
 Vessel for which vessel is intended **Indonesian Archipelago**

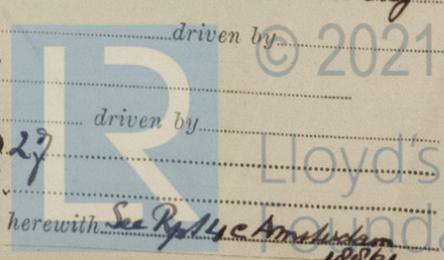
ENGINES, &c. — Type of Engines **TMAS 276** 2 or 4 stroke cycle **4** Single or double acting **single**
 Maximum pressure in cylinders **270** Diameter of cylinders **270** Length of stroke **500** No. of cylinders **6** No. of cranks **6**
 Indicated Pressure **11.0** Ahead Firing Order in Cylinders **1-5-3-2-4-6** Span of bearings, adjacent to the crank, measured inner edge to inner edge **11.0**
 Is there a bearing between each crank **yes** Revolutions per minute **1500**
 Wheel dia. **1100** Weight **1100** Moment of inertia of flywheel (lbs. in² or Kg. cm.²) **1100** Means of ignition **spark** Kind of fuel used **oil**
 Solid forged dia. of journals **110** as per Rule **110** Crank pin dia. **110** Crank webs Mid. length breadth **110** Mid. length thickness **110** Thickness parallel to axis **110** Thickness around eyehole **110**
 All built as fitted **110** Intermediate Shafts, diameter **190** as per Rule **190** Thrust Shaft, diameter at collars **145** as per Rule **145**
 Shaft, diameter **190** as per Rule **190** Screw Shaft, diameter **190** as per Rule **190** Is the (tube screw) shaft fitted with a continuous liner **yes**
 Liners, thickness in way of bushes **14** as per Rule **14** Thickness between bushes **11** as per Rule **11** Is the after end of the liner made watertight in the stern tube **yes**
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **yes**
 If two liners are fitted, is the shaft lapped or protected between the liners **yes** Is an approved Oil Gland or other appliance fitted at the after end of the stern tube **yes**
 Length of bearing in Stern Bush next to and supporting propeller **786**
 Material **bronze** whether moveable **no** Total developed surface **63.1%**
 Kind of damper, if fitted **no**

Is a governor or other arrangement fitted to prevent racing of the engine when declutched **no** Means of preventing oil from entering the crankcase **no**
 Thickness of cylinder liners **11** Are the cylinders fitted with safety valves **yes** Are the exhaust pipes and silencers water cooled **yes**
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned into the engine room **yes**
 Cooling Water Pumps, No. **2** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **yes**
 Pumps worked from the Main Engines, No. **2** Diameter **150** Stroke **150** Can one be overhauled while the other is at work **yes**
 Connected to the Main Bilge Line **yes** No. and size **1 each driven worm wheel pump type Houthin cap 30 m³/hr at 15 mbar back**
 How driven **pressure + 1 hand pump cap 30 ltr/min (above in eng room)**
 Bilge 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 **no**
 Power Driven Lubricating Oil Pumps, including spare pump, No. and size **2 of 89 mm + 2 of 57 mm**
 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 **2 of 89 mm + 2 of 57 mm** In pump room **5 of 57 mm (2 aft - 3 fore)**
 Direct Suctions to the engine room bilges, No. and size **1 of 89 mm**
 Bilge suction pipes in holds and tunnel 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**
 Connections fitted direct on the skin of the Ship **yes** Are they fitted with valves or cocks **valves** Are they fixed 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**
 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 **no**
 How are they protected **no pipes**
 Have they been tested as per Rule **no**
 Connections 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, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times **yes**
 Is the shaft tunnel watertight **yes** Is it fitted with a watertight door **no** worked from **no**
 Means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **no**

Compressors, No. **1** No. of stages **2** diameters **95-110 mm** stroke **85 mm** driven by **Aux Eng**
Air Compressors, No. **1** No. of stages **2** diameters **95-110 mm** stroke **85 mm** driven by **Aux Eng**
Auxiliary Air Compressors, No. **1** No. of stages **2** diameters **95-110 mm** stroke **85 mm** driven by **Aux Eng**
 Provision is made for first charging the air receivers **Aux engine is started by hand**
Air Pumps, No. **1** diameter **130.27** stroke **130.27** driven by **S.S.**
 Engines crank shafts, diameter **130.27** as per Rule **130.27** as fitted **130.27** No. **130.27** Position **S.S.**
 Auxiliary engines been constructed under special survey **yes** Is a report sent herewith **See Republic Indonesia 18861**

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AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....

Is each receiver, which can be isolated, fitted with a safety valve as per Rule.....

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..... Material..... 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..... Receivers..... Separate fuel tanks.....

Donkey boilers..... General pumping arrangements *26-2-52*..... Pumping arrangements in machinery space *26-2-52*.....

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved..... *yes*..... Date of approval *12-11-52*.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... *yes*.....

State the principal additional spare gear supplied.....

The foregoing is a correct description of the machinery..... Manufacturer.....

Dates of Survey while building.....

During progress of work in shops - - - *30/1 - 17/3 - 19/3 - 4/6 - 3/7 - 3/8 - 11/8 - '53*

During erection on board vessel - - -

Total No. of visits..... *9*

Dates of examination of principal parts—Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts *23-2-53*..... Tube shaft.....

Screw shaft *22-12-52*..... Propeller *2-1-53*..... Stern tube *9-12-52*..... Engine seatings *4-6-53*..... Engine holding down bolts *4-6-53*.....

Completion of fitting sea connections *19-3-53*..... Completion of pumping arrangements *3-8-53*..... Engines tried under working conditions *5-8-53*.....

Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark.....

Thrust shaft, material..... Identification mark..... Intermediate shafts, material *SM steel*..... Identification marks *Lloyds No. 639-653-4*

Tube shaft, material..... Identification mark..... Screw shaft, material *SM steel*..... Identification mark *Lloyds 636HB*

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

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..... *2x15 man's hose 4 lbs chlor of 1 1/2 lbs + 7 foam extinguisher of 9 lbs*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo..... *No*..... 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..... *yes*..... If so, state name of vessel.....

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

The machinery of this vessel has been built and fitted under special survey in accordance with approved plans, Secretary letters and Society Rules. Materials tested as required and workmanship found good. The machinery has been tried out under full load condition as a trial trip on August 3-1953 (MEN=370) and functioning satisfactory. Copy cert: Rotterdam No. 14579 of propeller; Rotterdam No. 14664 of Stern tube; Rotterdam No. 15463 of intermediate shafts; Dinslady D/F No. 9981 of propeller shaft; Rpt 4 No. 18786 Amsterdam of M.E and Rpt 4 C No. 18861 Amsterdam of aux eng. added. In my opinion the machinery of this vessel is eligible for the notation of + LMC (with date)

The amount of Entry Fee ... *220.-* When applied for *21-9-1953*

Special ... £ : : When received 19

Donkey Boiler Fee... £ : :

Travelling Expenses (if any) *27.50*

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

Committee's Minute..... *THURSDAY 29 OCT 1953*

Assigned..... *Deferred for Examination. See Dja Rpt 9 No 3929D.*

