

Rpt. 4b.

Completion of Amsterdam Rpt 4b No. 18909  
REPORT ON OIL ENGINE MACHINERY.10 SEP 1953  
No. 19160

Date of writing Report Aug 24 1953 When handed in at Local Office 19 Port of AMSTERDAM  
No. in Survey held at Leiden Date, First Survey June 1 Last Survey Aug 22 1953  
Reg. Book. Number of Visits 7  
Single on the Twin Screw vessel. BEKAKA Tons Gross 195  
Triple Quadruple Net 195  
Built at Leiden By whom built Scheepswaag, De Haard Yard No. 1427 When built 1953  
Engines made at AMSTERDAM By whom made N.V. Werkspoor Engine No. 1462 When made 1953  
Donkey Boilers made at AMSTERDAM By whom made N.V. Werkspoor Boiler No. 1462 When made 1953  
Brake Horse Power { Maximum 430 Owners Republic Indonesia Port belonging to Djakarta  
Service 430  
M.N. as per Rule 86 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted yes  
Trade for which vessel is intended Indonesian Archipelago

OIL ENGINES, &c. — Type of Engines TMAS 276 2 or 4 stroke cycle Single or double actingMaximum pressure in cylinders 10 Diameter of cylinders 100 Length of stroke 100 No. of cylinders 2 No. of cranks 2Mean Indicated Pressure 10 Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 10 Is there a bearing between each crank yes Revolutions per minute { Maximum 1000  
Service 1000Flywheel dia. 1000 Weight 1000 Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm.<sup>2</sup>) 1000 Means of ignition 1000 Kind of fuel used 1000  
" " " " balance wts. ( " " " " ) 1000Crank Shaft, { Solid forged 1000 dia. of journals 1000 as per Rule 1000 Crank pin dia. 1000 Crank webs 1000 Mid. length breadth 1000 Thickness parallel to axis 1000  
Semi built 1000 as fitted 1000 Mid. length thickness 1000 shrunk 1000 Thickness around eyehole 1000  
All built 1000Flywheel Shaft, diameter 1000 as per Rule 1000 Intermediate Shafts, diameter 1000 as per Rule 1000 Thrust Shaft, diameter at collars 1000 as per Rule 1000  
as fitted 1000 as fitted 1000 as fitted 1000Tube Shaft, diameter 1000 as per Rule 1000 Screw Shaft, diameter 1000 as per Rule 1000 Is the { tube 1000 shaft fitted with a continuous liner { yes  
as fitted 1000 as fitted 1000 screw 1000Bronze Liners, thickness in way of bushes 1000 as per Rule 1000 Thickness between bushes 1000 as per Rule 1000 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 yes  
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 yes  
If two liners are fitted, is the shaft lapped or protected between the liners yes  
Is an approved Oil Gland fitted at the after end of stern tube yes  
If so, state type funnel  
Length of bearing in Stern Bush next to and supporting propeller 986 mmPropeller, dia. 1515 mm Pitch 1195 mm No. of blades 4 Material Brass whether moveable NO Total developed surface 163.19 sq feet  
Moment of inertia of propeller including entrained water (lbs. in<sup>2</sup> or Kg. cm.<sup>2</sup>) 1000 Kind of damper, if fitted 1000Method of reversing Engines 1000 Is a governor or other arrangement fitted to prevent racing of the engine 1000 Means of lubrication 1000  
Thickness of cylinder liners 1000 Are the cylinders fitted with safety valves 1000 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 funnel  
Cooling Water Pumps, No. and how driven 1000 Working F.W. 1000  
S.W. 1000 Spare F.W. 1000 S.W. 1000 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yesBilge Pumps worked from the Main Engines, No. and capacity 1000 Can one be overhauled while the other is at work 1000Pumps connected to the Main Bilge Line { No. and capacity of each 1000 1 elect. driven worm wheel pump type Houtthorn Cap 30 m<sup>3</sup>/hr 15 mm  
How driven 1000 back pressure + 1 hand pump Cap 30 lts/min (above in eng. room)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 1000Ballast Pumps, No. and capacity 1000 Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 standby from elec. refAre two independent means arranged for circulating water through the Oil Cooler yes Branch Bilge Suctions 1000No. and size:—In machinery spaces 2 of 89 mm + 2 of 57 mm In pump room 1000In holds, &c. 5 of 57 mm (2 aft - 3 fore)Direct Bilge Suctions to the engine room bilges, No. and size 1 of 89 mmAre all the 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 yesAre all Sea Connections fitted direct on the skin of the Ship yes Are they fitted with valves or cocks valves 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 aboveAre 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 1000What pipes pass through the bunkers No pipes How are they protected 1000What pipes pass through the deep tanks 1000 Have they been tested as per Rule 1000Are all pipes, cocks, valves and pumps in connection with the machinery yes accessible at all times yesIs 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 1000 worked from 1000If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork 1000Main 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.Small Auxiliary Air Compressors, No. 1 No. of stages 2 diameters 95-110 mm stroke 85 mm driven by aux. eng.What provision is made for first charging the air receiver Aux engine can be started by handScavenging Air Pumps or Blowers, No. 1 How driven 1000Auxiliary Engines 1000 Have they been made under survey yes Engine Nos. 13028 Position of each in engine room S.S.  
Makers name N.V. Kraanbouw Amsterdam Report No. 4c Amsterdam 18940

24/11/53

010416 - 010427 - 0278



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

State full details of safety devices.....

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..... 25-3-52

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

**SPARE GEAR.**

Has the spare gear required by the Rules been supplied..... yes..... State if for "short voyages" only..... NO

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

The foregoing is a correct description,..... Manufacturer.....

Dates of Survey while building.....

During progress of work in shops..... 1/6 - 5/6 - 6/7 - 28/7 - 6/8 - 12/8 - 22/8 - 53

During erection on board vessel.....

Total No. of visits..... 8

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

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... 1-6-53 Tube shaft.....

Screw shaft..... 31-1-53 Propeller..... 30-10-52 Stern tube..... 29-5-53 Engine seatings..... 6-7-53 Engine holding down bolts..... 28-7-53

Completion of fitting sea connections..... 5-6-53 Completion of pumping arrangements..... 12-8-53 Engines tried under working conditions..... 22-8-53

Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark..... No. 733-738

Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... S.M. steel Identification marks..... J.L.E.M.D.

Tube shaft, material..... Identification mark..... Screw shaft, material..... S.M. steel Identification mark..... 14991

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

Full description of fire extinguishing apparatus fitted in machinery spaces..... 1 extra chon of 1 1/2 lbs + 2 foam of 9 lbs extinguishers

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.....

What is the special notation desired.....

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, Speed restrictions, &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 at a trial trip on Aug. 22-1953 (ME n = 375) and functioning satisfactory.

In my opinion the machinery of this vessel is eligible for the notation of + LMC (with date)

Copied Duplicates of F No. 3031 of screw shaft; Rotterdam No. 16303 of mid shafts; Rotterdam No. 16088 of stern tube, Rpt 146 No. 18989 Amsterdam of ME, Rpt 14C Amsterdam No. 18940 of aux eng and Rdam 14991 of propeller.

The amount of Entry Fee ... £ 220.-

Special ... £

Donkey Boiler Fee... £

Travelling Expenses (if any) £ 44.-

When applied for 5-11-1953

When received 19-

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned Defered for Completion

Sec Dja. Rpt 9. 123929c.

THURSDAY 26 NOV 1953