

## REPORT ON OIL ENGINE MACHINERY.

No. 363096

30 MAY 1953

Received at London Office

Date of writing Report 27<sup>th</sup> April 1953 When handed in at Local Office 19 Port of Rosserdam

in Survey held at Bolnes Date, First Survey 24<sup>th</sup> Sept 1952 Last Survey 8<sup>th</sup> April 1953

g. Book. 5554 Number of Visits 13

Single  
on the Twin  
Triple  
Quadruple

Screw vessel "MENGHARA" Tons Gross 1131.64 Net 501.68

at Bolnes By whom built Messrs Gels Pot Yard No. 927 When built 1952

ines made at Amsterdam By whom made Messrs Werkspoor N.V. Engine No. P 1436 When made 1952

key Boilers made at Amsterdam By whom made Messrs Werkspoor N.V. Boiler No. 3. 1440 When made 1952

ke Horse Power { Maximum 2 x 580 Owners Republik Indonesia Port belonging to Djakarta

Service 2 x 116 = 232 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

as per Rule 2 x 116 = 232

de for which vessel is intended Seagoing

ENGINES, &c. —Type of Engines See Amsterdam Rpt No 12563 2 or 4 stroke cycle Single or double acting

imum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓

n Indicated Pressure ✓ Span of bearings (i.e., distance between inner edges of bearings in of a crank) ✓ Is there a bearing between each crank ✓ Revolutions per minute { Maximum ✓ Service ✓

wheel dia. ✓ Weight ✓ Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) ✓ Means of ignition ✓ Kind of fuel used ✓

nk { Solid forged dia. of journals ✓ as per Rule ✓ Crank pin dia. ✓ Crank webs ✓ Mid. length breadth ✓ Thickness parallel to axis ✓  
ift, { Semi-built as fitted ✓ Mid. length thickness ✓ shrunk Thickness around eyehole ✓  
All built as fitted ✓

wheel Shaft, diameter ✓ as per Rule ✓ Intermediate Shafts, diameter ✓ as per Rule ✓ Thrust Shaft, diameter at collars ✓ as per Rule ✓

e Shaft, diameter ✓ as per Rule ✓ Screw Shaft, diameter ✓ as per Rule ✓ Is the { tube screw } shaft fitted with a continuous liner { yes }

nze 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 peller boss ✓

he 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- osive ✓ If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland fitted at the after of stern tube ✓ If so, state type ✓ Length of bearing in Stern Bush next to and supporting propeller ✓

eller, dia. 1750 mm Pitch 1265 mm No. of blades Three Material Brass whether moveable No Total developed surface 38.6 sq. feet

ent of inertia of propeller including entrained water (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>) ✓ Kind of damper, if fitted none

hod of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine ✓ Means of ication ✓ Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled gged with non-conducting material ✓ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned to the engine to funnel

Cooling Water Pumps, No. and how driven 3 - 1 each main engine 1 st. by elect. driven Working F.W. ✓

Spare F.W. ✓ S.W. 1-835 ltr/min 7.9 H.P. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

e Pumps worked from the Main Engines, No. and capacity ✓ Can one be overhauled while the other is at work ✓

ps connected to the Main Bilge Line { No. and capacity of each Two a 835 ltr/min 7.9 H.P. - One a 835 ltr/min 9.8 H.P. - One each main eng  
How driven Three elect. driven and Two main engine driven

e 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 ngements ✓

st Pumps, No. and capacity One a 835 ltr/min Power Driven Lubricating Oil Pumps, including spare pump, No. and size One each main eng. 4.5 H/h Two a 4900 ltr/h

two independent means arranged for circulating water through the Oil Cooler Yes Branch Bilge Suctions Sixteen

nd size:—In machinery spaces 7 a 70 mm (3 eng. room bilges - 2 eng. room cofferd - 2 in tunnel In pump room ✓

lds, &c. 3 a 70 mm (1 hld No 1 - 2 hld No 2 - 2 hld No 3 - 2 cofferd spt. 56-69 - 1 cofferd spt. 36-47 - 1 cofferd spt. 55-56

et Bilge Suctions to the engine room bilges, No. and size 2 a 80 mm (1 Port fwd. and 1 Starb. fwd. engine room)

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 sible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

all Sea Connections fitted direct on the skin of the Ship Yes Are they fitted with valves or cocks Valves Are they fixed iently 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

hey 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 ✓

t pipes pass through the bunkers none (pipe tunnel) How are they protected ✓

t pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓

all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times Yes

e 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 s, or from one compartment to another Yes Is the shaft tunnel watertight Yes Is it fitted with a watertight door Yes worked from deck

wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

n Air Compressors, No. One each engine No. of stages ✓ diameters ✓ stroke ✓ driven by ✓

iliary Air Compressors, No. Two No. of stages 2 - Capacity 37 m<sup>3</sup>/h diameters 95-110 mm stroke 25 mm driven by Elect. motor

ll Auxiliary Air Compressors, No. One No. of stages 2 - Cap. 15 m<sup>3</sup>/h diameters 75-85 mm stroke 70 mm driven by Emergency eng.

provision is made for first charging the air receivers Aux. air compr. driven by emergency hand started diesel eng. No 12604

3. Lending Air Pumps or Blowers, No. ✓ How driven ✓

liary Engines Have they been made under survey Yes Engine Nos. 12625-12626 and 12627

6. Makers name N.V. Motorenfabriek Kromhout Position of each in engine room Port - Starb. fwd. and Starb. aft.

Report No. 18497-18498-18499 Amsterdam  
Emergency eng. Rpt. 18575 A'dam.

010504-010518-0366

AIR RECEIVERS:—Have they been made under survey yes State No. of report or certificate Sheffield C 973b.  
State full details of safety devices One spring loaded safety valve on each  
Can the internal surfaces of the receivers be examined and cleaned yes Is a drain fitted at the lowest part of each receiver yes  
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. Three Total cubic capacity 1800 lbs Internal diameter                      thickness                       
Seamless, welded or riveted longitudinal joint                      Material                      Range of tensile strength                      Working pressure                     

IS A DONKEY BOILER FITTED No 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                       
(If not, state date of approval)  
Donkey boilers                      General pumping arrangements                      Pumping arrangements in machinery space                       
Oil fuel burning arrangements                       
Have Torsional Vibration characteristics been approved yes Date and particulars of approval 28-7-52

#### SPARE GEAR.

Has the spare gear required by the Rules been supplied yes State if for "short voyages" only                       
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 -                       
During erection on board vessel - 1952 24/9-27/9-6/11-24/11-19/12 1953 22/1-23/1-9/2-21/2-4/3-16/3-17/3-8/4  
Total No. of visits 13  
Dates of examination of principal parts—Cylinders                      Covers                      Pistons                      Rods                      Connecting rods                       
Crank shaft                      Flywheel shaft                      Thrust shaft                      Intermediate shafts                      Tube shaft                       
Screw shaft                      Propeller                      Stern tube 27/9-'52 Engine seatings 27/9-'52 Engine holding down bolts 6/11-24/11  
Completion of fitting sea connections 24/11-'52 Completion of pumping arrangements 8/4-'53 Engines tried under working conditions 16/3-17/3  
Crank shaft, material                      Identification mark                      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                       
Identification marks on air receivers See certificate

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 One 45 lbs. portable foam ext. - one foam hand ext. - two CO<sub>2</sub> hand a 6 kg and two valves with 10 mtr hoses.  
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                      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 fitted under Special Survey in accordance with the approved plans, Society's and Secretary's letters. It has been satisfactorily fitted in the vessel and is under full working and manouvring conditions and merits in our opinion the approval of the Committee to be assigned in the Society's Register Book with the of + LMC 4-53 and notation of T.S. 4-53 C.L. "Oil Engines" when a satisfactory report of Survey upon arrival in Indonesia will have reached the Committee of Lloyd's Register of Shipping, London.

The amount of Entry Fee ... 520.- When applied for 21-5-1953  
Special ... £ When received 19  
Donkey Boiler Fee... £  
Travelling Expenses (if any) £ 50.-  
(Committee's Minute FRI. 19 JUN 1953 Engineer Surveyor to Lloyd's Register of Shipping A Jacobs)  
Assigned + LMC 4.53 Oil Eng. CL.