

Rpt. 4b

17 MAR 1960

Date of writing report 12.3.60

Received London

Port EMDEN

No. 311

Survey held at Papenburg & Emden

No. of visits

In shops 4

First date 28.9.59

Last date 14.1.60

On vessel 14

First date 12.10.59

Last date 6.2.60

FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. Name "W A T U D A M B O" Gross tons 2165,31

Owners Republic of Indonesia Managers -- Port of Registry Djakarta

Hull built at Jos. L. Meyer, Papenburg By Jos. L. Meyer Year Month When 1960-2

Main Engines made at Hamburg By Eng. No. 405 349 When 1959-10

Gearing made at -- By --

Donkey boilers made at -- By -- Blr. Nos. -- When --

Machinery installed at Papenburg By Jos. L. Meyer When 1960-2

Particulars of restricted service of ship, if limited for classification --

Particulars of vegetable or similar cargo oil notation, if required --

Is ship to be classed for navigation in ice? no Is ship intended to carry petroleum in bulk? no

Is refrigerating machinery fitted? yes If so, is it for cargo purposes? no Type of refrigerant --

Is the refrigerating machinery compartment isolated from the propelling machinery space? yes Is the refrigerated cargo installation intended to be classed? --

The following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used. Where the wording is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report need not be repeated below, but the port and report number should be stated.

No. of main engines 1 No. of propellers 1 Brief description of propulsion system Oil engine direct to shaft

MAIN RECIPROCATING ENGINES. Licence Name and Type No. M.A.N. Type G8 V 40/60 Supercharged

No. of cylinders per engine 8 Dia. of cylinders 400 mm stroke(s) 600 2 stroke cycle yes Single acting yes

Maximum approved BHP per engine 1680 at RPM of engine and 275 RPM of propeller.

Corresponding MIP 10,5 kg/cm² (For DA engines give MIP top & bottom) Maximum cylinder pressure 62 kgs/cm² Machinery numeral 336

Are the cylinders arranged in Vee or other special formation? no If so, number of crankshafts per engine --

TWO STROKE ENGINES. Is the engine of opposed piston type? If so, how are upper pistons connected to crankshaft?

Is the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? No. and type of mechanically driven scavenge pumps or blowers per engine and how driven

No. of exhaust gas driven scavenge blowers per engine Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action?

If a stand-by or emergency pump or blower is fitted, state how driven No. of scavenge air coolers Scavenge air pressure at full power Are scavenge manifold explosion relief valves fitted?

FOUR STROKE ENGINES. Is the engine supercharged? yes Are the undersides of the pistons arranged as supercharge pumps? no No. of exhaust gas driven blowers per engine 1

No. of supercharge air coolers per engine none Supercharge air pressure 0,35 kgs/cm² Can engine operate without supercharger? yes

TWO & FOUR STROKE ENGINES—GENERAL. No. of valves per cylinder: Fuel 1 Inlet 1 Exhaust 1 Starting 1 Safety 1

Material of cylinder covers cast iron Material of piston crowns Aluminum alloy Is the engine equipped to operate on heavy fuel oil? no

Cooling medium for :—Cylinders freshwater Pistons uncooled Fuel valves fuel Overall diameter of piston rod for double acting engines --

Is the rod fitted with a sleeve? -- Is welded construction employed for: Bedplate? no Frames? no Entablature? -- Is the crankcase separated from the

underside of pistons? -- Is the engine of crosshead or trunk piston type? yes Total internal volume of crankcase 9,6 m³ No. and total area of explosion reliefdevices 8 of 1960 cm² Are flame guards or traps fitted to relief devices? traps Is the crankcase readily accessible? yes If not, must the engine be removed for

overhaul of bearings, etc? -- Is the engine secured directly to the hull or to a built-up seating? yes How is the engine started? by air

Can the engine be directly reversed? yes If not, how is reversing obtained? Case 436 V

Has the engine been tested working in the shop? yes How long at full power? 4 hours full load, 1 hour 10% overload 23.10.1959

CRANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system 5.3.59 State barred speed range(s), if imposed

for working propeller below 85rpm For spare propeller -- Is a governor fitted? yes Is a torsional vibration damper or detuner fitted to the shafting? yes

Where positioned? fwd. of crankshaft Type Huelsenfeder No. of main bearings 10 Are main bearings of ball or roller

type? no Distance between inner edges of bearings in way of crank(s) -- Distance between centre lines of side cranks or eccentrics of opposed piston engines --

Crankshaft type: Built, semi-built, solid. (State which) solid

Diameter of journals Diameter of crankpins Centre Breadth of webs at mid-throw Axial thickness of webs

Side Pins Minimum

If shrunk, radial thickness around eyeholes Are dowel pins fitted? Crankshaft material Journals Approved Tensile strength

Diameter of flywheel Weight Are balance weights fitted? Total weight Radius of gyration

Diameter of flywheel shaft Material Minimum approved tensile strength

Flywheel shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) integral with crankshaft

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GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship and give recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

The Main and auxiliary Engines of this vessel have been constructed under Special Survey (see attached Certificates) they have been installed in accordance with the approved plans and the Secretary's letters and the materials and workmanship are good. The machinery has been examined under working conditions during sea trials and found satisfactory.

The machinery of this vessel is eligible in my opinion to have record of + LMC 2.60

Tailshaft Continuous liner 2.60 Oil Engine 2 SCSA 400 x 600 mm, machinery numeral 336. Crank case explosion relief devices are fitted to Main and auxiliary engines.

The Main engines are not to be worked continuously below 85 RPM. ✓

Emaskov
Engineer Surveyor to Lloyd's Register of Shipping.

PARTICULARS OF IDENTIFICATION MARKS ((Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS --

CRANKSHAFT OR ROTORSHAFT --

FLYWHEEL SHAFT --

THRUSTSHAFT LLOYDS DTM HD 8.1.58 ✓ 159

GEARING --

INTERMEDIATE SHAFTS LLOYDS HNO 743, 746, 796, 799, 800, 802 ✓

SCREW AND TUBE SHAFTS LLOYDS HNO 749, 750. ✓

PROPELLERS Working: LLOYDS KLN 343, spare LLOYDS KLN 352 ✓

OTHER IMPORTANT ITEMS Short intermediate shaft, fly-wheel to thrust, LLOYDS KLN HD 2621. ✓

Is the installation a duplicate of a previous case? **yes** If so, state name of vessel **"WATAMPONE"**

Date of approval of plans for crankshaft -- Straight shafting **30.12.58** Gearing -- Clutch --

Separate oil fuel tanks -- Pumping arrangements **8.7.59** Oil fuel arrangements **8.7.59**

Cargo oil pumping arrangements -- Air receivers -- Donkey boilers --

Dates of examination of principal parts:—

Fitting of stern tube **23.10.59** Fitting of propeller **27.10.59** Completion of sea connections **23.10.59** Alignment of crankshaft in main bearings --

Engine checks & bolts **14.1.60** Alignment of gearing -- Alignment of straight shafting **14.1.60** Testing of pumping arrangements **6.2.60**

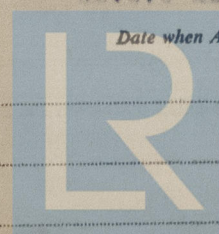
Oil fuel lines **14.1.60** Donkey boiler supports -- Steering machinery **6.2.60** Windlass -- **6.2.60**

Date of Committee **FRIDAY - 6 MAY 1960**

Decision *See Rpt. 1.* Special Survey Fee **£ 98. 0. 0.**

Expenses **£ 28. 0. 0.**

Date when A/c rendered



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