

REPORT ON OIL ENGINE MACHINERY.

No. 19531
21 JUN 1954

Received at London Office

Writing Report 3rd June 1954 When handed in at Local Office 19 Port of Amsterdam
Survey held at Amsterdam Date, First Survey 25th Nov. 1953 Last Survey 21st May 1954
Number of Visits 11
on the Single Screw vessel "GILISANG" "GILI YANG" Tons Gross Net
By whom built Scheepswerf "De Waal" Yard No. 650 When built
made at Amsterdam By whom made M.V. Werkspoor Engine No. 1795 When made 1954
Boilers made at By whom made Boiler No. When made
Horse Power { Maximum 1380 Owners Port belonging to
Service
per Rule 276 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
for which vessel is intended

ENGINES, &c. — Type of Engines T.M.A.S. 3910 2 or 4 stroke cycle 4 Single or double acting single
Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 390 mm Length of stroke 680 mm No. of cylinders 10 No. of cranks 10
Indicated Pressure 6.84 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in a crank) 492 mm Is there a bearing between each crank Yes Revolutions per minute { Maximum 275 Service

Wheel dia. 1500 mm Weight 1240 kg Moment of inertia of flywheel (lbs. in² or Kg.cm²) Means of ignition Compr. Kind of fuel used diesel
" " " " balance wts. (" " " ")
(Solid forged) dis. of journals as per Rule Crank pin dia. 300 mm Crank webs { Mid. length breadth 400 mm Thickness parallel to axis
Semi built as fitted 310 mm 155 mm { Mid. length thickness 125 mm Thickness around eye-hole
All built

Propeller Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
as fitted as fitted as fitted 395 mm
Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube } shaft fitted with a continuous liner {
as fitted as fitted as fitted { screw }

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 stern tube
as fitted as fitted
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 tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-ve. Is an approved Oil Gland fitted at the after stern tube
If so, state type Length of bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether moveable Total developed surface sq. feet
Moment of inertia of propeller including entrained water (lbs. in² or Kg.cm²) Kind of damper, if fitted
Direction of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine Yes Means of ignition forced
Thickness of cylinder liners 30 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned to the engine

Cooling Water Pumps, No. and how driven Working F.W.
Spare F.W. S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Pumps worked from the Main Engines, No. and capacity Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line { No. and capacity of each
How driven

Is cooling water led to the bilges If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements
Power Driven Lubricating Oil Pumps, including spare pump, No. and size One - Cap. 14000 lbs/hr.
Are there any independent means arranged for circulating water through the Oil Cooler Branch Bilge Suctions
In pump room
In machinery spaces
In other parts of the vessel

Bilge Suctions to the engine room bilges, No. and size
Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction pipes 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
Are they fixed

Sea Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed
Are they high on the ship's side to be seen without lifting the platform plates Are the overboard discharges above or below the deep water line
Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate
How are they protected
Are they tested as per Rule

Are all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times
Are the arrangements 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 Is the shaft tunnel watertight Is it fitted with a watertight door worked from

Are the means provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Main Air Compressors, No. No. of stages diameters stroke driven by
Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
All Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Is provision made for first charging the air receivers
Suction Air Pumps or Blowers, No. How driven Engine Nos.
Are they made under survey Position of each in engine room
Makers name Report No.



EW
16/7/54

4B. 19531.

AIR RECEIVERS:—Have they been made under survey yes State No. of report or certificate Df. C 7322
 State full details of safety devices Spring loaded safety valves
 Can the internal surfaces of the receivers be examined and cleaned yes Is a drain fitted at the lowest part of each receiver ye
 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. 2 Total cubic capacity 5000 lbs Internal diameter 768 mm thickness 16 mm
 Seamless, welded or riveted longitudinal joint welded Material S.M. Steel Range of tensile strength 44.5-45.6 kg/cm² Working pressure 3

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 ENG. 16-2-54 Receivers ENG. 16-2-54 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 D. 6-54 for 2754
SPARE GEAR.

Has the spare gear required by the Rules been supplied ✓ State if for "short voyages" only ✓
 State the principal additional spare gear supplied ✓

The foregoing is a correct description, **WERKSPOR N.V.** Manufacturer.
 Dates of Survey while building
 During progress of work in shops - - 1953: 25/11, 23/12, 28/12, 29/12; 1954: 5/1, 6/1, 29/3, 14/4, 4/5, 11/5, 21/5
 During erection on board vessel - - ✓
 Total No. of visits 11

Dates of examination of principal parts—Cylinders 19/53, 14/53, 18/53 Covers 29/12/53, 31/12/53, 12/1/54 Pistons 25/1/53, 23/12/53 Rods 8/5/54 Connecting rods 8/5/54
 Crank shaft 5/1/54 Flywheel shaft 2/9/53, 13/10/53, 21/11/53 Thrust shaft 1/2/54 Intermediate shafts ✓ Tube shaft ✓
 Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engine holding down bolts ✓
 Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions 11/5
 Crank shaft, material S.M. Steel Identification mark Lloyds AMS No 1212-1213 Flywheel shaft, material ✓ Identification mark ✓
 Thrust shaft, material S.M. Steel Identification mark Lloyds AMS No 1636 J.F.V. 1-2-54 Intermediate shafts, material ✓ Identification marks ✓
 Tube shaft, material ✓ Identification mark ✓ Screw shaft, material ✓ Identification mark ✓

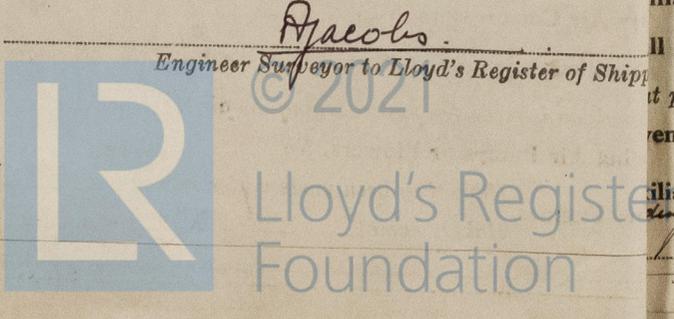
Identification marks on air receivers No 8215/2 71 Lloyds Test T.P. boiler W.P. 30 kg/cm² G.S. 21-3-53
No 8215/2 74 Lloyds Test T.P. boiler W.P. 30 kg/cm² G.S. 21-3-53

Welded receivers, state Makers' Name Messrs Stahlbau Rheinhausen of Rheinhausen
 Is the flash point of the oil to be used over 150°F ✓
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ✓
 Full description of fire extinguishing apparatus fitted in machinery spaces ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ 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 engine has been built under Special Survey in accordance with approved plans, Society's Rules and Secretarial letters. The materials have been tested as required and the workmanship found good. The engine has been tried on makers testbed under full load condition and found satisfactory and in my opinion, the vessel where this engine is intended for will be eligible for notation LMC with date when fitted and tried on board.
Copy certificates crankshaft - Thrustshaft and air receivers attached

The amount of Entry Fee ... £ 950.40
 Special ... £ When applied for 16-6-1954
 Donkey Boiler Fee... £ When received 19
 Travelling Expenses (if any) £ 19.-

Committee's Minute TUESDAY 22 FEB 1955
 Assigned + LMC 11.54
OG.



The Surveyors are requested not to write on or below the space for Committee's Minute.
 Certificate (if required) to be sent to
 10/1/55
 C. J. ... and No. 657