

Number: 754749

Yapong

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY

No. 140
11 FEB 1937

Date of writing Report 30th Nov. 1936 When handed in at Local Office Yokohama Port of Husselwang
No. in Survey held at Yokohama Date, First Survey 11th November Last Survey 27th Nov. 1936
Reg. Book. Number of Visits

on the Single Screw vessel Tons Gross
Triple Net
Built at Malapenasam By whom built Messrs. M. De Noand Yard No. 562 When built
Engines made at Yokohama By whom made Messrs. Humboldt. Deutarmotoren Engine No. 402067 When made 1936
Donkey Boilers made at By whom made Boiler No. When made
Brake Horse Power 400 Owners Port belonging to
Nom. Horse Power as per Rule 94.1 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Trade for which vessel is intended 11" 17 1/16"

OIL ENGINES, &c. Type of Engines Heavy Oil Engine A.V.M. 345 2 or 4 stroke cycle four Single or double acting single
Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 200 mm. Length of stroke 450 mm. No. of cylinders eight No. of cranks eight
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 307.5 mm. Is there a bearing between each crank yes
Revolutions per minute 300 Flywheel dia. 1250 mm. Weight 2600 kg. Means of ignition valve injection Kind of fuel used
Crank Shaft, dia. of journals as per Rule 190 mm. Crank pin dia. 170 mm. Crank Webs Mid. length breadth 340 mm. Thickness parallel to axis
as fitted 190 mm. Mid. length thickness 70 mm. shrunk Thickness around eye hole
Flywheel Shaft, diameter as per Rule 190 mm. Intermediate Shafts, diameter as fitted 190 mm. Thrust Shaft, diameter at collars as per Rule 160 mm.
as fitted as fitted as fitted 160 mm.
Tube Shaft, diameter as per Rule Screw Shaft, diameter as fitted Is the tube shaft fitted with a continuous liner screw

Bronze 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
as fitted as fitted
Propeller boss 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-corrosive
If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube
shaft If so, state type Length of Bearing in Stern Bush next to and supporting propeller

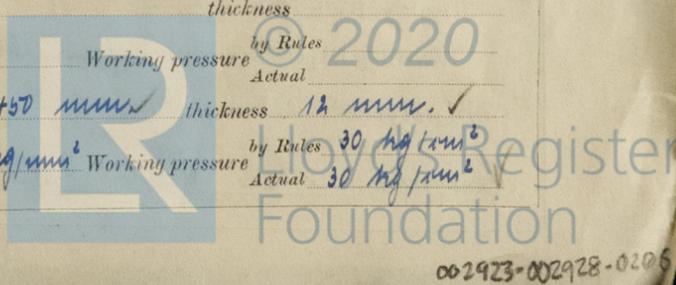
Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet
Method of reversing Engines fixed reversible Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication
Thickness of cylinder liners 25 mm. Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
non-conducting material water cooled If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
Cooling Water Pumps, No. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel
What special arrangements are made for dealing with cooling water if discharged into bilges

Bilge Pumps worked from the Main Engines, No. one Diameter 100 mm. Stroke 85 mm. Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line { No. and Size
How driven
Ballast Pumps, No. and size Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 tooth wheel pump and 1 spare
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces In Pump Room
Holds, &c.

Independent Power Pump Direct 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 Suctions in the Machinery Spaces
placed from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks
Are they fixed sufficiently 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
Have they been tested as per Rule

What pipes pass through the bunkers
What pipes pass through the deep tanks
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
Is 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
apartment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from
If on a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Main Air Compressors, No. one No. of stages two Diameters 145/160 mm. Stroke 85 mm. Driven by main engine
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Suction Air Pumps, No. Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule No.:—
as fitted Position —

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule
Are the internal surfaces of the receivers be examined and cleaned Is a drain fitted at the lowest part of each receiver
High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness
Material Range of tensile strength Working pressure by Rules
Actual
Suction Air Receivers, No. two Total cubic capacity 1000 litres Internal diameter 450 mm. thickness 12 mm.
Material lap welded 4.5M. steel Range of tensile strength 38.7 kg/cm² Working pressure by Rules 30 kg/cm²
Actual 30 kg/cm²
Reports has been forwarded to the Gunter head office.



002923-002928-0206

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 *1st. September 1936* Receivers *21st. July 1932* Separate Tanks

Donkey Boilers _____ General Pumping Arrangements _____ Oil Fuel Burning Arrangements _____

SPARE GEAR.

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

State the principal additional spare gear supplied *1 complete fuel valve, 2 sets of suction and delivery valves of the fuel pumps, 2 valves for fuel pumps, 1 main bearing, 1 main pin bearing, 1 gudgeon and assortment of springs, fuel needles etc. as ordered by the owners.*

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building: During progress of work in shops -- *11th November - 23rd November - 26th November - 27th November.*
 During erection on board vessel --
 Total No. of visits

Dates of Examination of principal parts—Cylinders *11. 11. 36* Covers *11. 11. 36* Pistons *11. 11. 36* Rods _____ Connecting rods *30. 10. 36*

Crank shaft *17. 10. 36* Flywheel shaft _____ Thrust shaft *2. 11. 36* Intermediate shafts *27. 11. 36* Tube shaft _____

Screw shaft _____ Propeller _____ Stern tube _____ Engine seatings _____ Engines holding down bolts _____

Completion of fitting sea connections _____ Completion of pumping arrangements _____ Engines tried under working conditions _____

Crank shaft, Material *Y.M. Steel* Identification Mark *282 L.S. 17.10.36* Flywheel shaft, Material _____ Identification Mark _____

Thrust shaft, Material *Y.M. Steel* Identification Mark *12622 M.B. 2.11.36* Intermediate shafts, Material *Y.M. Steel* Identification Marks *1172 H.B. 27.11.36*

Tube shaft, Material _____ Identification Mark _____ Screw shaft, Material _____ Identification Mark _____

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

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*

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 *Messrs. My. De Navon vessel No. 559. Dissolved report 122.*

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

The engines have been built in accordance with the approved plans and the requirements embodied in the Secretary's letter of the 1st. September 1936 and otherwise in accordance with the requirements of the rules. Material and workmanship are of the best quality, the outfit is ample. The engines have been tested under full working and manoeuvring conditions for about six hours on the trial stage in machine shops and have given full satisfaction. After trial all working parts have been opened up, and were found on examination in good condition. This machinery has been built under special survey and will be fitted on board the vessel No 552, in construction of Messrs. My. De of Alblasendam.

In my opinion this machinery is eligible for notation N.C. 1

The amount of Entry Fee .. *£40.-* When applied for, *2. 12. 1936* *£ of Amount No 9707*
 Special *£471.-*
 Donkey Boiler Fee *£* When received, *12. 1 1937*
 Travelling Expenses (if any) *£60.-*

H. Friggemann
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI 12 FEB 1937*
 Assigned *See Log 25236*

