

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 3 JAN 1949

Writing Report 27th Nov. 1948 When handed in at Local Office 19 Port of Amsterdam
 Survey held at Amsterdam Date, First Survey 2nd June Last Survey 20th Nov. 1948
 (Number of Visits 28)
 on the steel single screw 5/5 " BENGKALIS " Tons { Gross 6453
 Net 4025
 at Rotterdam By whom built My. voor Scheeps. & Werktuigbouw Yard No. When built 1918
 FUENOORD
 Engines made at Rotterdam By whom made do Engine No. When made 1918
 Boilers made at Rotterdam By whom made do Boiler No. 1208/9/10/11 When made 1917
 Indicated Horse Power 3600 I.H.P. Owners Stoomvaart My "NEDERLAND" Port belonging to Amsterdam
 Horse Power as per Rule 435 716 Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes
 for which Vessel is intended Ocean Trade

ENGINES, &c.—Description of Engines vertical triple expansion Revs. per minute 80
 No. of Cylinders 3 Length of Stroke 54" No. of Cranks 3
 shaft, dia. of journals as per Rule 15 1/4" Crank pin dia. 15 1/2" Mid. length breadth shrunk Thickness parallel to axis 10 1/4"
 as fitted 15 1/4" Mid. length thickness shrunk Thickness around eye-hole 6 13/16"
 Intermediate Shafts, diameter as per Rule 14 1/2" Thrust shaft, diameter at collars as per Rule 15 3/4"
 as fitted 14 1/2" as fitted 15 3/4"
 Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the screw shaft fitted with a continuous liner { yes
 as fitted as fitted CONE: 17 1/16" FORW: 15 1/2"
 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 27/32" as fitted 23/32" boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner one length
 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
 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
 no If so, state type Length of Bearing in Stern Bush next to and supporting propeller 69"
 Propeller, dia. 18'6" Pitch 14'9" No. of Blades 4 Material bronze whether Moveable yes Total Developed Surface sq. feet
 Pumps worked from the Main Engines, No. none Diameter Stroke Can one be overhauled while the other is at work
 Pumps worked from the Main Engines, No. 1 Diameter 6 7/8" Stroke 8 1/2" Can one be overhauled while the other is at work
 { No. and size 2 CHAPMAN, Woodeson. 12" x 9" x 21" Pumps connected to the Main Bilge Line { No. and size M.E. BILGEPUMP EMERGENCY BILGEPUMP 150 T/h
 1 TURBO FEEDPUMP 45 T/h SANITARY PUMP 50 T/h
 How driven steam (3)
 Pumps, No. and size 1 Duplex 150 T/h Lubricating Oil Pumps, including Spare Pump, No. and size
 independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary
 pumps;—In Engine and Boiler Room 2 (φ 3 1/2") & 1 (φ 2") Tunnel Forw: 1 (φ 2") Tunnelwell: 1 (φ 2 1/2") Deep tanks: 2 (φ 3 1/2")
 Refrig. hold: 2 (φ 3 1/2") In Holds, N° 1: 2 (φ 3 1/2") N° 2: 2 (φ 3 1/2") N° 3: 2 (φ 3 1/2") N° 4: 2 (φ 3 1/2")

See endorsement 7/11/49 4/19/49

Water Circulating Pump Direct Bilge Suctions, No. and size 1 (φ 10") Independent Power Pump Direct Suctions to the Engine Room Bilges,
 size 1 (φ 4") on Ballast pump Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes
 Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 Sea Connections fitted direct on the skin of the ship inlet chests Are they fitted with Valves or Cocks yes
 fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Overboard Discharges above or below the deep water line above
 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 yes
 Pipes pass through the bunkers none How are they protected
 Pipes pass through the deep tanks none Have they been tested as per Rule
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 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 yes Is it fitted with a watertight door yes worked from top E room

BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 11480 sq. ft.
 Draft fitted yes No. and Description of Boilers 4 Scotch (oil fired) Working Pressure 180 lbs.
 REPORT ON MAIN BOILERS NOW FORWARDED? yes
 DONKEY BOILER FITTED? no If so, is a report now forwarded?
 Donkey boiler intended to be used for domestic purposes only
 Plans Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 General Pumping Arrangements will be forwarded Oil fuel Burning Piping Arrangements

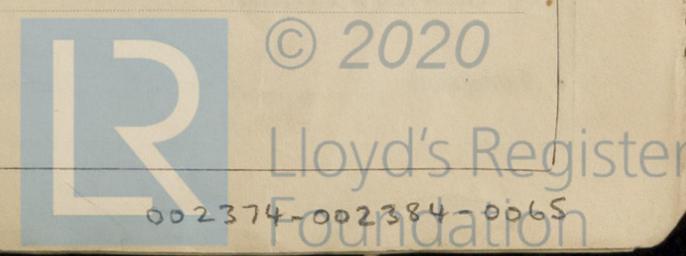
SPARE GEAR.

Spare gear required by the Rules been supplied yes (3 cast iron spare blades with studs & nuts for propeller)
 principal additional spare gear supplied 1 spare tail shaft (CL)
 1 ME crank

This main engine has no ME driven air pump but an independent horizontal Duplex condensate pump and 2 vacuum ejectors.

The foregoing is a correct description.

Manufacturer.



During progress of work in shops - - -

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits

Dates of Examination of principal parts - *Please see Survey Rpt. 9*

Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam 8-11-48

Main boiler safety valves adjusted 15-11-48 Thickness of adjusting washers STARB. FORW: 14,5 & 13,6 mm PORT FORW: 16,3 & 14,4 mm AFT: 17,5 & 22,2 mm AFT: 18,4 & 15,4 mm

Crank shaft material SM steel Identification Mark BV marks Thrust shaft material SM steel Identification Mark BV marks

Intermediate shafts, material SM steel Identification Marks BV marks Tube shaft, material Identification Mark

Screw shaft, material SM steel Identification Mark BV marks Steam Pipes, material steel Test pressure 40 kg/cm² Date of Test 31-7-48

Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes

Have the requirements of the Rules for the use of oil as fuel been complied with yes

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

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 no If so, state name of vessel

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

This machinery has been built under Special Survey of Bureau Veritas.

This vessel, being since 3,41 under the Society's Supervision (Classification Contemplated) has now been submitted for Machinery Survey. As the vessel is 30 years old, no more plans were available. At our request a plan of shafting and a photostat-copy of the Boiler plan have been made and are forwarded herewith. A plan of Bilge-, Ballast- & Oil fuel pumping Arrangement is in preparation and will be forwarded in due course.

The entire machinery has been opened out, examined and found or brought in efficient condition (please see Survey Rpt. 9)

On completion of the survey the machinery installation has been tried under steam with satisfactory results.

I am of opinion that this vessel's machinery merits the approval of the Committee and may be assigned in Society's Register Book with record of LMC. 11,48 and notation of Tailshaft (C.L.) seen 10,48

The amount of Entry Fee ... £	7760.-	When applied for,	
Special £	:	10-12 19.48	
Donkey Boiler Fee £	:	When received,	
Travelling Expenses (if any) £	27,50	19	

[Signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 29 APR 1949*

Assigned *See minute on JE rpt*



Certificate to be sent to AMSTERDAM SURVEYORS

The Surveyors are requested not to write on or below the space for Committee's Minute.

Date of writing

No. in Reg. Book. 20140 on

Master

Engines made

Boilers made

Nominal Horse

MULTITUD

Manufacturers

Total Heating

No. and Desc

Tested by hydr

Area of Firegr

Area of each

In case of doub

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Smallest distan

Largest intern

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