

REPORT ON MACHINERY.

No. 8163.

Received at London Office

WED. OCT. 26 1920

Date of writing Report 25 Sept 1920 When handed in at Local Office

19

Port of Amsterdam

No. in Survey held at Amsterdam

Date, First Survey 13 April Last Survey 20 Sept 1920

Reg. Book.

(Number of Visits 15.)

on the Engines of the Steel Screw Steamer N: 41.

Master Built at Capelle 2 1/2 Yssel By whom built A. Kuik & Zonen

Tons } Gross
Net
When built 1920

Engines made at Amsterdam By whom made Kerschure & Co

when made

Boilers made at By whom made

when made

Registered Horse Power Owners Hollandse Maatschappij Port belonging to Rotterdam

Nom. Horse Power as per Section 28 223.9 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted

ENGINES, &c.—Description of Engines Triple Expansion

No. of Cylinders three No. of Cranks three

Dia. of Cylinders 20" x 31 1/2" x 53" Length of Stroke 36" Revs. per minute 90 Dia. of Screw shaft as per rule 11 1/16" Material of screw shaft as fitted 11 1/16" steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes. Is the after end of the liner made water tight

in the propeller boss Yes. If the liner is in more than one length are the joints burned 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 Yes. If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 51 1/2"

Dia. of Tunnel shaft as per rule 9 1/8" Dia. of Crank shaft journals as per rule 10 1/16" Dia. of Crank pin 10 1/16" Size of Crank webs 6 1/8" x 10 1/8" Dia. of thrust shaft under

collars 10 1/16" Dia. of screw 14 1/8" Pitch of Screw No. of Blades 4 State whether moveable No Total surface

No. of Feed pumps two Diameter of ditto 3 1/4" Stroke 18" Can one be overhauled while the other is at work Yes

No. of Bilge pumps two Diameter of ditto 3 1/4" Stroke 18" Can one be overhauled while the other is at work Yes

No. of Donkey Engines two Sizes of Pumps 6 x 4 x 6 Duplex. No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 1 1/2 x 8 1/2 x 10 duplex. In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes 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

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

OILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to

each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

bottom Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

W48-0126

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IS A DONKEY BOILER FITTED? ☒

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *to be verified when Engines & Boilers are completed in the vessel.*

The foregoing is a correct description.

VERSCHURE & Co's
Schepwerf en Machinefabriek

W. Verschure

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 13 April. 25 May. 8-10 June. 3. 8. 10. 16-31 July. 3. 13. 28 Aug. 1. 8-20 Sep.
During erection on board vessel - - -
Total No. of visits 15 visits

Is the approved plan of main boiler forwarded herewith ☒

" " " donkey " " " ☒

Dates of Examination of principal parts—Cylinders $\frac{13}{4}$ $\frac{25}{5}$ $\frac{10}{6}$ $\frac{16-31}{7}$ Slides $\frac{8-10}{6}$ $\frac{31}{7}$ Covers $\frac{31}{7}$ Pistons $\frac{16-31}{7}$ $\frac{13-28}{8}$ Rods $\frac{13-28}{8}$
Connecting rods $\frac{3-13}{8}$ Crank shaft $\frac{25}{6}$ $\frac{8-10}{6}$ $\frac{31}{7}$ Thrust shaft $\frac{8-10}{6}$ $\frac{31}{7}$ $\frac{3}{8}$ Tunnel shafts $\frac{31}{7}$ $\frac{3}{8}$ Screw shaft $\frac{13-28}{8}$ Propeller $\frac{1}{9}$
Stern tube $\frac{13}{8}$ Steam pipes tested ☒ Engine and boiler seatings ☒ Engines holding down bolts ☒
Completion of pumping arrangements ☒ Boilers fixed ☒ Engines tried under steam ☒
Completion of fitting sea connections ☒ Stern tube ☒ Screw shaft and propeller ☒
Main boiler safety valves adjusted ☒ Thickness of adjusting washers ☒

Material of Crank shaft *of M. Ann* Identification Mark on Do. *LLOYDS N° 345 J.B.S. 8.10* Material of Thrust shaft *of M. Ann* Identification Mark on Do. *LLOYDS N° 346 J.B.S. 8.10*
Material of Tunnel shafts *of M. Ann* Identification Marks on Do. *LLOYDS N° 347-351 J.B.S. 8.10* Material of Screw shafts *of M. Ann* Identification Marks on Do. *LLOYDS N° 351.3 J.B.S. 8.10*
Material of Steam Pipes ☒ Test pressure ☒

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

Have the requirements of Section 49 of the Rules 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, &c.)

The machinery of this vessel has been constructed in accordance with the Society's rules & approved plans which are retained in this Office in order to deal with a duplicate set in construction by the same firm for their N° 40. The material is good & tested as required. Workmanship good throughout, all castings are sound, all cylinders with valve casings, Condenser & steam tube have been tested under hydraulic pressure with satisfactory results.

This machinery has been transported to Messrs A. Luyk & Zonen Shipbuilders at Capelle a/d IJssel in order to be fitted in their S.C. N° 41 vessel. The Society's Rotterdam district Surveyors have been advised and a copy of this report forwarded to their Office for guidance.

** Duplicate copies of the plans are also in London Office*

The amount of Entry Fee ... £ : : When applied for,
Special *2/3* ... £249.60 : : Sept 1920
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) *5.60* : : 19

J. B. Olver

F. W. Munro
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. NOV. 26 1920

FRI. AUG. 11 1922

Assigned

TUES. 23 DEC 1924

TUES. 29 DEC 1925

TUES. 15 SEP 1925

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