

REPORT ON MACHINERY

No. 10624
THU. 24 OCT. 1918

Received at London Office

Port of Rotterdam

Date of writing Report 14 of October 1918 When handed in at Local Office

Date, First Survey 15-16

Last Survey 29 1918

No. in Survey held at Rotterdam

(Number of Visits 33)

Tons 950

on the Dutch Steel Screw Steamer Export

When built 1918

Master Goodens

Built at Millingen

By whom built Messrs. Bodewes

When made 1918

Engines made at Rotterdam

By whom made Messrs. Buisson's Machinefabriek

when made 1918

Boilers made at SB

By whom made SB

when made 1918

Registered Horse Power 2

Owners Rotterdam London Lijn

Port belonging to Rotterdam

Nom. Horse Power as per Section 28 117 N.H.P.

Is Refrigerating Machinery fitted for cargo purposes ✓

Is Electric Light fitted ✓

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 15 3/4 x 15 5/8 x 41 3/8

Length of Stroke 14 5/8

Revs. per minute 99

Dia. of Screw shaft 9 1/4

Material of screw shaft Steel

Is the after end of the liner made water tight ✓

If the liner does not fit tightly at the part ✓

Length of stern bush 2-2

Dia. of Tunnel shaft 8 1/4

Dia. of Crank shaft journals 8 1/4

Dia. of Crank pin 8 1/16

Size of Crank webs 18 x 5 1/2

Dia. of thrust shaft under 38 1/2

No. of Feed pumps 2

Diameter of ditto 2

Stroke 15 1/4

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2

Diameter of ditto 2

Stroke 15 3/4

Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2

Sizes of Pumps Prod. 6 x 4 x 6, Baller 6 x 4 1/2 x 6

No. and size of Suctions connected to both Bilge and Donkey pumps 2 1/2

In Engine Room Three of 2 1/2

In Holds, &c. One in Port and one in Starboard wing of 2 1/2

No. of Bilge Injections 1 sizes 3 1/2

Connected to circulating pump

Is a separate Donkey Suction fitted in Engine room of size 1/2 of 2 1/2

Are all the bilge suction pipes fitted with roses Yes

Are the roses in Engine room always accessible Yes

Are the sluices on Engine room bulkheads always accessible ✓

Are all connections with the sea direct on the skin of the ship Yes

Are they Valves or Cocks Both

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

Are the Discharge Pipes above or below the deep water line Above

Are they 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

What pipes are carried through the bunkers Suctions for hold, protected by wooden casing

How are they protected wooden casing

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

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

Is the Screw Shaft Tunnel watertight None

Is it fitted with a watertight door no

worked from No

BOILERS, &c.—(Letter for record S)

Manufacturers of Steel Rheinische Stahlwerke

Total Heating Surface of Boilers 20600

Is Forced Draft fitted No

No. and Description of Boilers 2 single ended marine boilers

Working Pressure 180 lb

Tested by hydraulic pressure to 240 lb

Date of test 5-6-17

No. of Certificate 634

Can each boiler be worked separately Yes

Area of fire grate in each boiler 144 sq ft

No. and Description of Safety Valves to 33.50

each boiler Two spring loaded

Area of each valve 4 sq in

Pressure to which they are adjusted 180 lb

Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork over 1 1/2

Mean dia. of boilers 10 1/10

Length 9 1/4

Material of shell plates Steel

Thickness 3/16

Range of tensile strength 28-35 tons

Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams all rivet cap

long. seams all rivet cap

Diameter of rivet holes in long. seams 1 1/16

Pitch of rivets 6 1/8

Lap of plates or width of butt straps 15 3/4

Per centages of strength of longitudinal joint 84.5

Working pressure of shell by rules 193 lb

Size of manhole in shell 12 x 16

Size of compensating ring 8 x 1 1/2

No. and Description of Furnaces in each boiler 2. 9mm

Material Steel

Outside diameter 3-5 3/8

Length of plain part top 4 bottom 4

Thickness of plates 9/16

Description of longitudinal joint welded

No. of strengthening rings 4

Working pressure of furnace by the rules 185 lb

Combustion chamber plates: Material Steel

Thickness: Sides 1/16

Back 1/16

Top 1/16

Bottom 3/4

Pitch of stays to ditto: Sides 8 1/16 x 7 5/16

Back 7 1/2 x 8 1/2

Top 8 1/4 x 8 1/2

If stays are fitted with nuts or riveted heads riveted, nutted

Working pressure by rules 190 lb

Material of stays Steel

Material of stays Steel

Area at smallest part 1.48 sq ft

Area supported by each stay 6.3 sq ft

Working pressure by rules 205 lb

End plates in steam space: Steel

Material Steel

Thickness 3/32

Pitch of stays 18 1/2 x 14 3/8

How are stays secured riveted, nutted

Working pressure by rules 265

Material of Front plates at bottom Steel

Area at smallest part 5.4 sq ft

Area supported by each stay 2.7 sq ft

Working pressure of plate by rules 280 lb

Thickness 1/4

Material of Lower back plate Steel

Thickness 1/4

Greatest pitch of stays 14 1/2 x 8 1/2

Working pressure of plate by rules 280 lb

Diameter of tubes 3 1/2

Pitch of tubes 4 5/16 x 4 5/16

Material of tube plates Steel

Thickness: Front 3/32

Back 1/32

Mean pitch of stays 8 5/8 x 12 1/2

Working pressures by rules 213 lb

Pitch across wide water spaces 14 1/8

Working pressures by rules 213 lb

Girders to Chamber tops: Material Steel

Depth and Steel

thickness of girder at centre 1 x 5/8 x 1/2

Length as per rule 24 1/2

Distance apart 8 1/4

Number and pitch of stays in each 2 at 8 1/16

Working pressure by rules 205 lb

% of strength of joint 84.5

Working pressure by rules 205 lb

Steam dome: description of joint to shell no

Diam. of rivet holes no

Diameter no

Thickness of shell plates no

Material no

Description of longitudinal joint no

How stayed no

Pitch of rivets no

Working pressure of shell by rules no

Crown plates no

Thickness no

Tested by Hydraulic Pressure to no

SUPERHEATER. Type None

Date of Approval of Plan no

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler no

L of Test no

Pressure to which each is adjusted no

Is Easing Gear fitted no

Diameter of Safety Valve no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules no

Working pressure of shell by rules no

Is Easing Gear fitted no

Working pressure of shell by rules

IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— *2 top end bolts and nuts, 2 bottom end bolts and nuts, 2 main bearing bolts, 1 set of expansion bolts, 1 set of feed and bilge pump valves, 1 set of piston springs, a quantity of assorted bolts and nuts. Iron of various sizes.*

The foregoing is a correct description,
BURGERHOUT'S MACHINEFABRIEK & SCHEEPWERF

J. Verwaat

Manufacturer.

Dates of Survey while building
During progress of work in shops: *Sept. 15/19, 25/19, 23/10, 22/11, 19/12, 11/1, 11/1, 16/1, 24/1, 22/2, 20/2, 25/2, 24/3, 25/3, 5/4, 29/4, 2/5, 14/5, 30/5, 23/6, 13/7, 24/7*
During erection on board vessel: *8/6, 14/6, 19/6, 20/6, 23/6, 27/6, 29/6, 5/7, 10/7*
Total No. of visits: *33*

Is the approved plan of main boiler forwarded herewith? *yes*
also pumps, *sh. fitting plan*
" " " donkey " " "

Dates of Examination of principal parts—Cylinders *17/11-24/11* Slides *20/11-22/11* Covers *17/11-24/11* Pistons *23/11-22/12* Rods *22/11-22/12*
Connecting rods *22/11-23/11* Crank shaft *11/1-14/1* Thrust shaft *13/1-17/1* Tunnel shafts *4* Screw shaft *13/1-27/1* Propeller *14/1*
Stern tube *14/1-24/1* Steam pipes tested *17/1-18* Engine and boiler seatings *8/1* Engines holding down bolts *20/1-24/1*
Completion of pumping arrangements *20/1* Boilers fixed *12/1* Engines tried under steam *24/1*
Completion of fitting sea connections *17/1* Stern tube *17/1* Screw shaft and propeller *24/1*
Main boiler safety valves adjusted *30/1* Thickness of adjusting washers *Pat. No. 1, 2, 4/12* *Pat. No. 3, 4, 5/11*
Material of Crank shaft *Steel* Identification Mark on Do. *Lloyd's 158.6.4.17* Material of Thrust shaft *Steel* Identification Mark on Do. *Lloyd's 158.6.4.17*
Material of Tunnel shafts *Steel* Identification Marks on Do. *4* Material of Screw shafts *Steel* Identification Marks on Do. *Lloyd's 158.6.4.17*
Material of Steam Pipes *Steel* Test pressure *600 lbs.*

Is an installation fitted for burning oil fuel? *no* 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? *no*

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.)

Secretary's letter M. Belg. and ballast suction connected to pumps, heavy hand pumps suction connected to distribution box; steam and exhaust piping to all deck machinery tested.

The machinery and boiler having fitted in accordance with the approved plans and Secretary's letter, material tested as required and workmanship good, the machinery having worked good under steam. I am of opinion that the vessel is eligible to be recorded in the Society's Register Book. + L.M.C. 9.18.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 9.18

J. Verwaat
29-10-18
J.P.R.

The amount of Entry Fee ... £ *24* : When applied for,
Special *25* ... £ *210.60* : *2/10* 1918
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) *7* ... £ *31* : *7/10* 1918

P. R. Beumer
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 1-NOV. 1918

Assigned

+ L.M.C. 9.18

MACHINERY CERTIFICATE
WRITTEN



© 2020

Lloyd's Register
Foundation

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.