

REPORT ON MACHINERY.

Port of

Göthenburg

Received at London Office

THUR, 12 SEP 1895

No. in Survey held at
Reg. Book.

Göthenburg

Date, first Survey

January 1895

Last Survey

29th Aug

1895

(Number of Visits)

on the

Sug and Icebreaker Smely

Tons { Gross 228
Net 106

Master P. Ahlman

Built at

Göthenburg

By whom built

Lindholmens Verkstads AB. Bol

When built

1895

Engines made at

Motala

By whom made

Motala Nya Aktiebolaget

when made

1895

Boilers made at

Göthenburg

By whom made

Lindholmens Verkstads AB. Bol

when made

1895

Registered Horse Power 120

Owners

Russian Steam Navigation and Trading Co. Ltd.

Port belonging to

Odessa

Nom. Horse Power as per Section 28 90.

ENGINES, &c.—

Description of Engines

Triple Expansion Surface Condensing Engine

No. of Cylinders

3

Diameter of Cylinders

14" x 22 1/2" x 38"

Length of Stroke

26"

Revolutions per minute

120

Diameter of Screw shaft

as per rule 6.75
as fitted 7 1/2"

Diameter of Tunnel shaft

as per rule 6.42
as fitted 7 1/2"

Diameter of Crank shaft journals

7 1/2"

Diameter of Crank pin

7 1/2"

Size of Crank webs

10 x 4 1/2"

Diameter of screw

8'-3"

Pitch of screw

11'-0"

No. of blades

4

State whether moveable

no

Total surface

26 sq feet

No. of Feed pumps

2

Diameter of ditto

2 1/4"

Stroke

13"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

2 1/4"

Stroke

13"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

2

Sizes of Pumps

5 1/4 x 3 1/2 x 5
5 1/4 x 4 3/4 x 5

Worthingtons

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

In Engine Room

1, 3"

In Holds, &c.

2

3 inches

No. of bilge injections

2

sizes 3 1/2" and 7"

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size 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

Kingston valves

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

auxiliary steam and water pipes

How are they protected

with wood and sheet iron

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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

Aug 1895

Is the screw shaft tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from the Cabin

OILERS, &c.—

(Letter for record S)

Total Heating Surface of Boilers

1610 sq'

No. and Description of Boilers

1

Working Pressure

160 lbs

Tested by hydraulic pressure to

320 lbs

Date of test

4/8 1895

Can each boiler be worked separately

Area of fire grate in each boiler

57 sq'

No. and Description of safety valves to

each boiler

2 Adams Patent

Area of each valve

12.56 sq"

Pressure to which they are adjusted

165 lbs

Are they fitted

with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

12"

Mean diameter of boilers

12'-9"

Length

10'-6"

Material of shell plates

Steel

Thickness

1 1/8"

Description of riveting: circum. seams

Double riveted

long. seams

Double riveted

Diameter of rivet holes in long. seams

1 3/16"

Pitch of rivets

7 1/16"

Lap of plates or width of butt straps

17 1/8"

Per centages of strength of longitudinal joint

rivets 87
plate 83

Working pressure of shell by rules

173 lbs

Size of manhole in shell

16" x 11"

Size of compensating ring

25" diam

No. and Description of Furnaces in each boiler

3

Marion's

Material

Steel

Outside diameter

38"

Length of plain part

top —
bottom —

Thickness of plates

crown 7/16"
bottom 7/16"

Description of longitudinal joint

Welded

No. of strengthening rings

—

Working pressure of furnace by the rules

165 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

9/16"

Pitch of stays to ditto: Sides

8" x 8"

Back

8" x 8 1/4"

Top

8 1/4" x 6 1/2"

Stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

161 lbs

Material of stays

Steel

Diameter at smallest part

1 3/8"

Area supported by each stay

66 sq"

Working pressure by rules

179 lbs

End plates in steam space:

Material

Steel

Thickness

3/4"

Pitch of stays

13" x 13"

How are stays secured

Double nuts

Working pressure by rules

170 lbs

Material of stays

Steel

Diameter at smallest part

2"

Area supported by each stay

169 lbs

Working pressure by rules

167 lbs

Material of Front plates at bottom

Steel

Thickness

3/4"

Material of Lower back plate

Steel

Thickness

2 1/32"

Greatest pitch of stays

8 1/4"

Working pressure of plate by rules

162 lbs

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/4" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

3/4"

Back

3/4"

Mean pitch of stays

9 1/2"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

168 lbs

Girders to Chamber tops: Material

Steel

thickness of girder at centre

7" x 2"

Length as per rule

2'-6"

Distance apart

8 1/4"

Number and pitch of Stays in each

3 x 6 1/2"

Working pressure by rules

166 lbs

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

—

Lloyd's Register

Foundation

GOT 1115-0163

DONKEY BOILER—

Description
 Made at _____ By whom made _____ When made _____ Where fixed _____
 Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____
 No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____
 Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:—1 piece of crank-shaft. 1 spare propeller. 1 set piston rings. 1 set valves to each of the air, feed and bilge pumps. 1 set coupling bolts. 2 pair brasses for connecting rod top and bottom. 1 pair mainbearing brasses etc. etc.

The foregoing is a correct description,

LINDHOLMENS VERKSTADS AKTIEBOLAG Manufacturer.

Sven Almqvist

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

This Machinery is manufactured of the best materials tested as per Rule and in accordance with the approved plan and the Committee's letter of 14/1 1895. The workmanship is a first class work and the whole to my satisfaction. I am of the opinion that this machinery merits the favourable consideration of the Hon. Committee to be classed **L.M.C. 8.95**

It is submitted that this vessel is eligible for

THE RECORD **L.M.C. 8.95.**

A.S.
 12.9.95.

Certificate (if required) to be sent to *The Surveyor at Gothenburg*

The amount of Entry Fee..	£ 1 :	:	When applied for,
Special	£ 13 :	11 :18.....
Donkey Boiler Fee	£ - :	:	When received, <i>C.H.</i>
Travelling Expenses (if any) £	10 :	:Sept. 1895.....

C. A. Moller
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

Assigned

+ L.M.C. 8.95

FRI. 13 SEP 1895



© 2020

Lloyd's Register Foundation