

Rpt. 4.

REPORT ON MACHINERY.

No. 7818.

Date of writing Report 24th Feb. 1914. When handed in at Local Office

4 MAR 1914

Received at London Office

FRI. MAR. 6 - 1914

Port of

DUNDEE

No. in Survey held at
Reg. Book.

Dunder

Date, First Survey 20th May 1913 Last Survey 19th February 1914

102 on the Part of the Machinery of the STEEL TWIN Sc. Ss. "SELENE"

(Number of Visits 6)

Master

Built at Dunder

By whom built Calson AB. & S. Co. Ltd.

Tons

Gross

Net

When built 1914

Engines made at

Amsterdam

By whom made

Nederlandsche Fabriek van Werktuigen
in Haarlem - Nederland

when made 1914

Boilers made at

Dunder

By whom made

Calson AB. & S. Co. Ltd.

when made 1914

Registered Horse Power

Owners Anglo-Siam Petroleum Co. Ltd.

Port belonging to Gravenhage

Nom. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

as per rule

Material of

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

no space

If two

liners are fitted, is the shaft lapped or protected between the liners

✓

Length of stern bush 3'-7⁵/₁₆'

Dia. of Tunnel shaft

as per rule

Dia. of Crank shaft journals

as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

collars

Dia. of screw

11'-2" Pitch of Screw

8'-6"

No. of Blades 3

State whether moveable solid Total surface 44.25 sq ft

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

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

In Engine Room

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

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

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

Dates of examination of completion of fitting of Sea Connections 15-12-13 of Stern Tubes 15-12-13 Screw shafts and Propellers 15-12-13

Is the Screw Shaft Tunnel watertight

none

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

No Main 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

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

Diameter 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

Diameter 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

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

W1644-0112

Lloyd's Register
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VERTICAL DONKEY BOILER— Manufacturers of Steel

No. Description An Report 5a on Donkey Boiler

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of Safety

Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment

If fitted with easing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length

Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams

Dia. of rivet holes Whether punched or drilled Pitch of rivets Lap of plating Per centage of strength of joint Rivets Plates

Working pressure of shell by rules 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

Working pressure of furnace by rules Thickness of furnace crown plates Radius of do. Stayed by

Diameter of uptake Thickness of uptake plates Thickness of water tubes Dates of survey

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

FOR THE CALEDON SHIPBUILDING & ENGINEERING CO., LIMITED.

J. G. Bruce SECRETARY.

Dates of Survey while building { During progress of work in shops - - 10/5/13 12/9/13 4/12/13 15/12/13
During erection on board vessel - - 19/2/14
Total No. of visits 6

Is the approved plan of main boiler forwarded herewith

" " " donkey " " " yes.

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods

Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller 19-11-13

Stern tubes 20/5/13 21/11/13 Steam pipes tested ~~DONKEY~~ Engine and boiler seatings 18-12-13 Engines holding down bolts

Completion of pumping arrangements Boilers fixed 12-1-14 Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Test pressure

General Remarks (State quality of workmanship, opinions as to class, &c. This vessel's donkey boiler, stern tubes, propeller and thrust blocks were made by the Caledon S.B. & E. Co., Ltd. The material and workmanship are of good description.

The thrust, intermediate, and propeller shafts were made at Amsterdam.

The donkey boiler, propeller, stern tubes, sea connections, thrust, intermediate, and propeller shafts, and thrust blocks were fitted on board at this port.

Note: The Donkey Boiler is placed on the upper deck at forward end of engine room. It is intended to fit this boiler for burning oil fuel as well as coal.

The vessel has proceeded to Amsterdam where the engines are to be fitted on board.

The amount of Entry Fee .. £ : : When applied for,

Special .. £ : : 19-11-13

Donkey Boiler Fee .. £ : : When received,

Travelling Expenses (if any) £ : : 19-11-13

Committee's Minute

FRI SEP 11 1914

Assigned

James Cunningham
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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