

## REPORT ON MACHINERY

No. 6903.

SAT. 1-JUL. 1916

Received at London Office

MON. 6-MAR. 1916

Reporting Report 23 Albany 10/16 When handed in at Local Office

Port of Amsterdam

Survey held at Amsterdam

Date, First Survey 17 May 1915 Last Survey 25 January 1916

Book.

4 on the Motor Engine Motor vessel Sebastian

(Number of Visits 43)

Gross 3140

Net 1846

When built 1914

Built at Dundee

By whom built Caledon &amp; Co. Ltd.

es made at Amsterdam

By whom made Wertheim.

when made 1914

rs made at

By whom made

when made

tered Horse Power

Owners Sebastian Diesel Motor Boat Co.

Port belonging to London

Horse Power as per Section 28 375

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

INES, &amp; Co.—Description of Engines

Two Single acting 4 cycle Diesel Engines

No. of Cylinders 6

No. of Cranks 6

of Cylinders 520 mm

Length of Stroke 900 mm

Revs. per minute 130

Dia. of Screw shaft

as per rule 2.64 in

Material of screw shaft Steel

screw shaft fitted with a continuous liner the whole length of the stern tube

Is the after end of the liner made water tight

propeller boss

If the liner is in more than one length are the joints burned

If the liner does not fit tightly at the part

in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

If two

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

Length of stern bush

of Tunnel shaft

as per rule 2.48 in

Dia. of Crank shaft journals

as per rule 3.16 in

Dia. of Crank pin 320 mm

Size of Crank webs 415 x 160

Dia. of thrust shaft under

as 140 mm

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

of Bilge pumps

Two

Diameter of ditto 100 mm

Stroke 250 mm

Can one be overhauled while the other is at work

of Donkey Engines

Sizes of Pumps

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

Engine Room

In Holds, &amp;c.

Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room &amp; size

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

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

Are they Valves or Cocks

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

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

pipes are carried through the bunkers

How are they protected

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

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

of examination of completion of fitting of Sea Connections

of Stern Tube

Screw shaft and Propeller

Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

ERS, &amp; Co.—(Letter for record) Manufacturers of Steel

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

each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

least distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

seams

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

percentages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

th 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

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

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

Material

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

W777-00481/2



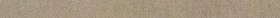
If so, is a report now forwarded?

*Manufacturer.*

Dates of Examination of principal parts—Cylinders <sup>31 May 4.11.21 1.8.22</sup> Slides <sup>31 May 4.11.21 1.8.22</sup> Covers <sup>17 May to 26 May</sup> Pistons <sup>17 May to 26 May</sup> Rods <sup>29 June</sup>  
 Connecting rods Crank shafts <sup>25 June to 16 Dec</sup> Thrust shafts <sup>29 June to 16 Dec</sup> Tunnel shafts <sup>29 June to 16 Dec</sup> Screw shafts <sup>29 June to 16 Dec</sup> Propeller  
 Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts  
 Completion of pumping arrangements Boilers fixed Engines tried under steam  
 Main boiler safety valves adjusted Thickness of adjusting washers  
 Material of Crank shafts <sup>SB 111, SB 112, SB 113, SB 114, SB 115, SB 116, SB 117, SB 118, SB 119, SB 120, SB 121, SB 122, SB 123, SB 124, SB 125, SB 126, SB 127, SB 128, SB 129, SB 130, SB 131, SB 132, SB 133, SB 134, SB 135, SB 136, SB 137, SB 138, SB 139, SB 140, SB 141, SB 142, SB 143, SB 144, SB 145, SB 146, SB 147, SB 148, SB 149, SB 150, SB 151, SB 152, SB 153, SB 154, SB 155, SB 156, SB 157, SB 158, SB 159, SB 160, SB 161, SB 162, SB 163, SB 164, SB 165, SB 166, SB 167, SB 168, SB 169, SB 170, SB 171, SB 172, SB 173, SB 174, SB 175, SB 176, SB 177, SB 178, SB 179, SB 180, SB 181, SB 182, SB 183, SB 184, SB 185, SB 186, SB 187, SB 188, SB 189, SB 190, SB 191, SB 192, SB 193, SB 194, SB 195, SB 196, SB 197, SB 198, SB 199, SB 200, SB 201, SB 202, SB 203, SB 204, SB 205, SB 206, SB 207, SB 208, SB 209, SB 210, SB 211, SB 212, SB 213, SB 214, SB 215, SB 216, SB 217, SB 218, SB 219, SB 220, SB 221, SB 222, SB 223, SB 224, SB 225, SB 226, SB 227, SB 228, SB 229, SB 230, SB 231, 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SB 732, SB 733, SB 734, SB 735, SB 736, SB 737, SB 738, SB 739, SB 740, SB 741, SB 742, SB 743, SB 744, SB 745, SB 746, SB 747, SB 748, SB 749, SB 750, SB 751, SB 752, SB</sup>

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

The amount of Entry Fee ... £	:	:	When applied for,
Special ... 3/3 ...	£ 310.-		<i>filed</i> 1916
Donkey Boiler-Fee ...			When received,
Travelling Expenses (if any) ...	£ 23.40		<i>filed</i> 1916

  
 Engineer-Surveyor to Lloyd's Register of British & Foreign Ships

*Assigned*

to the Smith's Dock Co Newcastle.  
This vessel's machinery has been constructed in accordance with the Society's rules and approved plans which are herewith returned to London Office. Materials used in the construction of good quality and tested as required. Workmanship throughout good. All cylinders, casings (of which one was condemned see our Correspondence of the 18 May and 5<sup>th</sup> & 10<sup>th</sup> of June 1915) water-jackets, compressors, coolers, chests & starting air reservoirs tested to twice their respective working pressures with satisfactory results.

Two injection air & two floating fuel bottles which have not been tested at the Makers now tested under our pressure to 150 atmospheres with satisfactory results, will however require to be replaced by  
The screws shafts will require to be fitted to the old propellers for which purposes these propellers will have to be boxed out.  
All pumps & piping arrangement in connection with the motor engines tested under hydraulic pressure & found good.  
Upon completion and satisfactorily reported by the Society Newcastle's Surveyors the vessel will be eligible to be recorded in the Society's Register Book.

✠ LMC. 1916 Subject to two injec.  
air & two floating fuel bottles being replaced  
bottles made & tested as required at the  
earliest convenience.

Marks on Air Reservoirs

No 263 - 268 LLOYD'S TEST 530 lbs  
H.P.B. 21.9.15 ✓

Marks on Cylinders

No 211-12 LLOYD'S TEST 65 ATM L.B. 5.9.15  
No 221-22 " " " " L.B. 5.4.6.15  
No 224-25 " " " " H.P.B. 11.6.15  
No 227-28 " " " " L.B. 5.21.6.15  
No 233-34 " " " " L.B. 5.1.7.15  
No 241-42 " " " " H.P.B. 8.7.15  
No 283 " " " " H.P.B. 12.11.15

Port of Amsterdam 23 February 1916

J. B. Mac.