

REPORT ON MACHINERY.

No. 11041

Received at London Office

12 OCT. 1921

Date of writing Report

10

When handed in at Local Office

11th Oct. 1921 Port of

Southampton

No. in Survey held at
Reg. Book.

Cowes

Date, First Survey

Nov 29th 1920

Last Survey

May 13th 1921

on the

S.S. "KILDAVIN"

NAMED "LEESIDE"

(Number of Visits)

7

Tons

Gross 634.42

Net 285.85

When built 1918

Master

Built at

Middlesbrough

By whom built

Smith's Dock Co. Ltd.

Engines made at

Middlesbrough

By whom made

Smith's Dock Co. Ltd.

when made

1918

Boilers made at

Jarrow

By whom made

Palmer S.B. Co.

when made

1918

Registered Horse Power

Owners

The Side Shipping Co.

Port belonging to

Newcastle

Nom. Horse Power as per Section 28

132

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

16" x 26" x 44"

Length of Stroke

26"

Revs. per minute

Dia. of Screw shaft

as per rule 8 1/2"

Material of screw shaft

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 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

-

If two

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

-

Length of stern bush

4'-0 1/2"

Dia. of Tunnel shaft

as per rule 7.94

Dia. of Crank shaft journals

as per rule 8.33

Dia. of Crank pin

8 1/2"

Size of Crank webs

5 1/2" x 13"

Dia. of thrust shaft under

collars

8 1/2"

Dia. of screw

9'-6"

Pitch of Screw

-

No. of Blades

4

State whether moveable

No

Total surface

-

No. of Feed pumps

2

Diameter of ditto

4"

Stroke

18"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

6"

Stroke

6"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

2 duplex

Sizes of Pumps

7" x 4 1/2" x 8'-6" x 6" x 6"

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

In Engine Room

3'-2" and ejector

In Holds, &c.

2" in each compartment

No. of Bilge Injections

1

sizes

6"

Connected to condenser, or to circulating pump

to pump

Is a separate Donkey Suction fitted in Engine room & size

Yes

2" diam

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

Yes

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

forward sections

How are they protected

strong canvas

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

Yes

Is it fitted with a watertight door

Yes (hinged)

worked from

bottom platform

BOILERS, &c.—(Letter for record

Manufacturers of Steel

Total Heating Surface of Boilers

1825

Is Forced Draft fitted

Yes

No. and Description of Boilers

one cylindrical multitubular

Working Pressure

200

Tested by hydraulic pressure to

-

Date of test

-

No. of Certificate

-

Can each boiler be worked separately

-

Area of fire grate in each boiler

5'-1.5"

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

5'-94"

Pressure to which they are adjusted

200

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

12"

Mean dia. of boilers

13ft

Length

11'-6"

Material of shell plates

steel

Thickness

1 1/4"

Range of tensile strength

28 to 32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

double

long. seams

7/8" D.P. type

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

9 3/8"

Lap of plates or width of butt straps

18 3/8"

Per centages of strength of longitudinal joint

rivets 86.59

plate 86.58

Working pressure of shell by rules

201

Size of manhole in shell

16" x 12"

Size of compensating ring

7' x 1 1/8"

No. and Description of Furnaces in each boiler

3 Dugltons

Material

steel

Outside diameter

41 5/8"

Length of plain part

top

bottom

Thickness of plates

9/16"

Description of longitudinal joint

welded

No. of strengthening rings

-

Working pressure of furnace by the rules

211

Combustion chamber plates: Material

steel

Thickness: Sides

1/16"

Back

1/16"

Top

1/16"

Bottom

1/16"

Pitch of stays to ditto: Sides

9' x 8 3/4"

Back

8 3/4' x 8 3/4"

Top

9' x 8 3/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

207

Material of stays

steel

Area at smallest part

2.1"

Area supported by each stay

78.75"

Working pressure by rules

240

End plates in steam space:

Material

steel

Thickness

1 3/8"

Pitch of stays

17 1/2' x 17 1/2'

How are stays secured

to nuts

Working pressure by rules

211

Material of stays

steel

Area at smallest part

6.6"

Area supported by each stay

306

Working pressure by rules

220

Material of Front plates at bottom

steel

Thickness

1"

Material of Lower back plate

steel

Thickness

1"

Greatest pitch of stays

14 1/2' x 8 3/4"

Working pressure of plate by rules

241

Diameter of tubes

2 1/2"

Pitch of tubes

3 1/2' x 3 1/2'

Material of tube plates

steel

Thickness: Front

1"

Back

1 1/8"

Mean pitch of stays

8 3/4"

Pitch across wide water spaces

13 1/4"

Working pressures by rules

204

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

8' x 1 1/4"

Length as per rule

31 1/4"

Distance apart

8 1/2"

Working pressure by rules

202

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

008789-008795-0079

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IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:—

*2 connecting rod top end bolts & nuts; 2 bottom end bolts and nuts;
1 main bearing bolt; set of coupling bolts; set of feed & bilge
pump valves; set of piston rings; a quantity of assorted bolts and
nuts and iron of various sizes*

The foregoing is a correct description,

Manufacturer.

Dates of Survey
During progress of work in shops --
During *SURVEY* on board vessel --
while building
Total No. of visits

29, 10.16, 1920. 7, 15, 5, 13. 1921

Is the approved plan of main boiler forwarded herewith *✓*

Dates of Examination of principal parts—Cylinders	Slides	Covers	Pistons	Rods
Connecting rods	Crank shaft	Thrust shaft	Tunnel shafts	Screw shaft
Stern tube	Steam pipes tested	Engine and boiler seatings	Engines holding down bolts	Propeller
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	PORT VALVE <i>25/64</i>	STEAM VALVE <i>23/64</i>	
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	<i>stul</i>	Test pressure	<i>600 lbs</i>	

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

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 not been built under special survey.
All cylinders, pistons, slide valves & faces, condenser, air, circulating,
feed & bilge pumps examined; Crank, Thrust & intermediate shafting
examined and all found sound & free from defects. Auxiliary
machinery examined and found in good order.
Main boiler examined internally and externally with mountings
and found in a good & safe working condition; Safety valves
adjusted under steam to 200 lbs per sq inch & found satisfactory.
The propeller shaft and sea cocks were examined in September 1920
by the B.C. Surveyor (see London letter dated Dec 7th 1920)
Steam pipes tested to 600 lbs per sq inch
This vessel's machinery is in safe working condition eligible in my
opinion to have the notation C.M.C. 5-21*

The amount of Entry Fee ... £
Special *Inclosure fee* ... £
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for.

When received.

Committee's Minute

As signed

MACHINERY CERTY
WRITTEN

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. NOV. 17 1922

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