

REPORT ON MACHINERY.

No. 38528

t. 4.

Received at London Office

WED. 19 FEB. 1919

of writing Report

10

When handed in at Local Office

10

Port of Glasgow

Date, First Survey 11/4/19

Last Survey 22/1/19

1919

Survey held at Coatbridge

on the machinery of "Strath" Trawler "Leanne Dobson"

Built at Hook on Gorb

By whom built Wm Beardmore & Co. Ltd.

When built 1915

Tons

When built

Names made at Coatbridge

By whom made Wm Beardmore & Co. Ltd.

By whom made

Port belonging to

Registered Horse Power

Owners

Is Electric Light fitted

m. Horse Power as per Section 28 74.5

Is Refrigerating Machinery fitted for cargo purposes

GINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders 3

No. of Cranks 3

a. of Cylinders 12" - 20" + 34"

Length of Stroke 23"

Revs. per minute

Dia. of Screw shaft

as per rule 6.85"

Material of W. I.

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

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

Yes

If two

Length of stern bush 2'-6"

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

a. of Tunnel shaft

as per rule 6.121"

Dia. of Crank shaft journals

as per rule 6.42"

as fitted 6.75"

Dia. of Crank pin 6 3/4"

Size of Crank webs 12 1/4" x 4 3/4"

Dia. of thrust shaft under

llars 6 3/4"

Dia. of screw 8'-4"

Pitch of Screw 11'-6"

No. of Blades 4

State whether moveable no

Total surface 29 sq

o. of Feed pumps 1

Diameter of ditto 2 7/8"

Stroke 12"

Can one be overhauled while the other is at work

o. of Bilge pumps 1

Diameter of ditto 2 7/8"

Stroke 12"

Can one be overhauled while the other is at work

o. of Donkey Engines

Sizes of Pumps

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

Engine Room

In Holds, &c.

o. 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

Are they Valves or Cocks

Are 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

Are 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

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

of Stern Tube

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

OILERS, &c.—(Letter for record

Manufacturers of Steel

Total 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

allest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

ickness

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

centages of strength of longitudinal joint

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

gth of plain part

Thickness of plates

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

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

Abn. 212-1919.

VERTICAL DONKEY BOILER— Manufacturers of Steel

No.	Description				
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
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	Rivet Plate
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,
WILLIAM BEARDMORE & CO., LIMITED.

Manufacturer. *per R. McDonald.*

Dates of Survey while building	During progress of work in shops - - -	1917 Apr 11 July 26 Sept 11 Oct 12 25 Nov 13 16 22 26 29 Dec 3 10 17 20 1918 Jan 9 15 21
	During erection on board vessel - - -	16 19 25 Mar 11 27 Apr 14 May 23 30 June 21 Sept 12 16 19 24 27 Oct 7 15 28 Nov 7 14 20 25 28
	Total No. of visits	11 11

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 16-9-18. Slides 7-10-18. Covers 16-9-18. Pistons 15-10-18. Rods 15-10-18. Connecting rods 15-10-18. Crank shaft 19-9-18. Thrust shaft 27-9-18. Tunnel shafts 27-9-18. Screw shaft 27-9-18. Propeller 19-9-18. 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 shaft M. S.	Identification Mark on Do.	Material of Thrust shaft M. S. Identification Mark on Do.
Material of Tunnel shafts M. S.	Identification Marks on Do.	Material of Screw shafts W. S. Identification Marks on Do.
Material of Steam Pipes		Test pressure

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

The machinery has been built under Special Survey in accordance with Rules of the Society and the Approved Admiralty Specification and will be eligible in my opinion to have notation **LMC** with date when it has securely fitted on board and tried under steam with satisfactory results. The materials and Workmanship are of good quality throughout. The machinery has been dispatched to Aberdeen to be installed on board the vessel.

Glasgow

Certificate (if required) to be sent to

The amount of Entry Fee	£	:	:	When applied for,
Special	£ 12	:	5	1917 July 26
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	:	:	3-4-19

Committee's Minute GLASGOW 18 FEB 1919

Assigned Defered for compl

John Barr.
Engineer Surveyor to Lloyd's Register of British & Foreign

