

REPORT ON MACHINERY.

No. 37024

Date of writing Report

19

When handed in at Local Office

5/5/26 Port of

Hull

Received at London Office

13 MAY 1926

No. in Survey held at
Reg. Book.

Hull

Date, First Survey

1-1-26

Last Survey

28-4-1926

(Number of Visits

28

Gross

352

Net

147

on the steam trawler "TOURMALINE".

Master

Built at

Beverly

By whom built Cook, Welton & Gemmell, Ltd.

When built

1926.

Engines made at

Hull

By whom made Charles D. Holmes & Co. Ltd. (n 1299)

when made

1926

Boilers made at

Hull

By whom made Charles D. Holmes & Co. Ltd. (n 1299)

when made

1926

Registered Horse Power

Owners Kingston Steam Trawling Co. Ltd. Port belonging to

Hull

Nom. Horse Power as per Section 28

96

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

as per rule

Material of

screw shaft

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

36"

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

Total surface

34 sq

No. of Feed pumps

one

Diameter of ditto

2 7/8

Stroke

14 3/4

Can one be overhauled while the other is at work

No. of Bilge pumps

one

Diameter of ditto

2 7/8

Stroke

14 3/4

Can one be overhauled while the other is at work

No. of Donkey Engines

one

Sizes of Pumps

6 x 4 1/2 x 6 & 1 geyser

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

In Engine Room

2 @ 2" dia; one for & one aft.

In Holds, &c. One 2" from each Compartment.

No. of Bilge Injections

1

sizes

3 1/2"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes, 3"

Are all the bilge suction pipes fitted with roses

mud boxes

Are the roses in Engine room always accessible

yes

Are the sluices on Engine room bulkheads always accessible

none

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 suction

How are they protected

wood casing

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

worked from

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Mannesmannröhren Werke, Hückingen.

Total Heating Surface of Boilers

1698 sq

Is Forced Draft fitted

no

No. and Description of Boilers

One S.E. main.

Working Pressure

200

Tested by hydraulic pressure to

350

Date of test

22-3-26

No. of Certificate

3592

Can each boiler be worked separately

yes

Area of fire grate in each boiler

49.2 sq

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

4.90"

Pressure to which they are adjusted

200 lb

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

7"

INT.

Mean dia. of boilers

14-0"

Length

10-8"

Material of shell plates

S

Thickness

1 1/2"

Range of tensile strength

28/32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

8 9/16"

Lap of plates or width of butt straps

18 13/16"

Per centages of strength of longitudinal joint

rivets

90.8

Working pressure of shell by rules

201

Size of manhole in shell

16 x 12"

Material

S

Size of compensating ring

36 x 27 x 1 1/2"

No. and Description of Furnaces in each boiler

3 plain.

Material

S

Outside diameter

4.1

Length of plain part

top

76

Thickness of plates

crown

13 1/16"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

219

Combustion chamber plates: Material

S

Thickness: Sides

3/4"

Back

23/32"

Top

3/4 + 23/32"

Bottom

3/4"

Pitch of stays to ditto: Sides

9 x 8 3/4"

Back

9 x 8 1/2"

Top

9 x 8 3/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

230

Material of stays

S

Area at smallest part

2.070

Area supported by each stay

78.750

Working pressure by rules

230

End plates in steam space:

Material

S

Thickness

1 3/16"

Pitch of stays

18"

How are stays secured

D.N.W.

Working pressure by rules

220

Material of stays

S

Area at smallest part

7.50

Area supported by each stay

32.40

Working pressure by rules

275

Material of Front plates at bottom

S

Thickness

15/16"

Material of Lower back plate

S

Thickness

29/32"

Greatest pitch of stays

14 x 8 3/4"

Working pressure of plate by rules

228

Diameter of tubes

3 1/2"

Pitch of tubes

4 7/8"

Material of tube plates

S

Thickness: Front

15/16"

Back

7/8"

Mean pitch of stays

11.2"

Pitch across wide water spaces

13 3/4"

Working pressures by rules

212

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9 1/2"

Length as per rule

36 3/16"

Distance apart

9

Number and pitch of stays in each

3 @ 8 3/4"

Working pressure by rules

210

Steam dome: description of joint to shell

Diameter

yes

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diam. of rivet holes

yes

Pitch of rivets

yes

Working pressure of shell by rules

yes

Crown plates

yes

Thickness

yes

How stayed

yes

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

010004-010011-0150

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top end belts & nuts, 2 bottom end belts & nuts, 2 main bearing belts & nuts, Set of coupling belts & nuts, valves for air, feed, bilge, & donkey pumps, main & donkey check valves, safety valve spring, circulating pump impeller & spindle. Feed pump ram, gland, & neck ring.

The foregoing is a correct description,

CHARLES D. HONER & SONS LTD
D. Cooper

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1926: Jan. 5, 12, 20, 22, 28, Feb 3, 9, 10, 11, 12, 16, 17, 23, 24, 26, Mar 4, 9, 15
During erection on board vessel -- 17, 18, 22, 29, Apr 14, 16, 20, 26, 28.
Total No. of visits 28.

Is the approved plan of main boiler forwarded herewith yes

15-3-26 " " " donkey " " "
Dates of Examination of principal parts—Cylinders 29-3-26 Slides 17-3-26 Covers 15-3-26 Pistons 17-3-26 Rods 17-3-26
Connecting rods 17-3-26 Crank shaft 9-3-26 Thrust shaft 9-3-26 Tunnel shafts ✓ Screw shaft 10-2-26 Propeller 12-2-26
Stern tube 12-2-26 Steam pipes tested 21-4-26 Engine and boiler seatings 26-2-26 Engines holding down bolts 20-4-26
Completion of pumping arrangements 28-4-26 Boilers fixed 20-4-26 Engines tried under steam 26-4-26
Completion of fitting sea connections 26-2-26 Stern tube 26-2-26 Screw shaft and propeller 26-2-26
Main boiler safety valves adjusted 26-4-26 Thickness of adjusting washers F. $\frac{7}{16}$ A. $\frac{9}{32}$
Material of Crank shaft Steel Identification Mark on Do. 214 P.F. Material of Thrust shaft Steel Identification Mark on Do. 214 P.F.
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. 214 P.F.
Material of Steam Pipes S.D. Copper 4" dia. 6 W.G. ✓ Test pressure 400 lb per sq. in.

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 Yes If so, state name of vessel Sardinia

General Remarks (State quality of workmanship, opinions as to class, &c. The engines & boiler of this vessel have been built under special survey, & in accordance with the approved plans & the Rules of this Society. The materials & workmanship are good. The machinery has been satisfactorily fitted on board, tried under working conditions, & found good. The steam & feed pipes have been tested by hydraulic pressure as required by the Rules. The safety valves have been adjusted under steam & tried for accumulation. The machinery is eligible in my opinion for the record + LMC 4.26; c.l. in the Register Book.

The steel invoices were forwarded with Hull Report No 36953 on the duplicate boiler 1298. (S.T. Sardinia)

It is submitted that this vessel is eligible for THE RECORD + LMC 4.26 CL.

The amount of Entry Fee ... £ 2 : -
Special ... £ 24 : -
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ :
When applied for 11/5/26
When received 1/6/26

P. Fitzgerald.
Engineer Surveyor to Lloyd's Register of Shipping.
13/5/26.

Committee's Minute

FRL 14 MAY 1926

Assigned

+ LMC 4.26
C.L.

TUES. 22 JUN 1926



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