

REPORT ON MACHINERY

No. 37297.

Received at London Office

10 AUG 1926

Writing Report

9 AUG 1926

When handed in at Local Office

Aug 9th 1926 Part of HULL.

Survey held at Hull

Date, First Survey 14 Feby

Last Survey Aug 7th 1926.

Book. on the Steam trawler "KINGSTON DIAMOND"

(Number of Visits 15)

er Built at Beverley

By whom built Cook Weller & Gemmell LS

Tons } Gross
Net
When built 1926.

ues made at Hull

By whom made Charles S. Holmes & Co (1301) when made 1926

rs made at Hull

By whom made " " " " (") when made 1926.

stered Horse Power

Owners Kingston S. Trawling Co LS Port belonging to Hull

Horse Power as per Section 28

96.

Is Refrigerating Machinery fitted for cargo purposes

ho

Is Electric Light fitted

Yes.

INES, & Co.—Description of Engines Triple Expansion

No. of Cylinders 3

No. of Cranks 3

of Cylinders 13. 23. 34

Length of Stroke 26

Revs. per minute 110

Dia. of Screw shaft

as per rule 4.7

Material of Steel.

e 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

he propeller boss

Yes

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

Yes

If the liner does not fit tightly at the part

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

✓

If two

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

Length of stern bush 36"

of Tunnel shaft

as per rule 6.89

Dia. of Crank shaft journals

as per rule 4.24

as fitted 4 1/2

Dia. of Crank pin

4 1/2

Size of Crank webs 14 1/2 x 4 1/2

Dia. of thrust shaft under

rs 4 1/2

Dia. of screw

9.9

Pitch of Screw

11.0

No. of Blades 4

State whether moveable

ho

Total surface 34 sq. ft.

of Feed pumps One

Diameter of ditto 2 7/8

Stroke 14 3/4

Can one be overhauled while the other is at work

✓

of Bilge pumps One

Diameter of ditto 2 7/8

Stroke 14 3/4

Can one be overhauled while the other is at work

✓

of Donkey Engines One

Sizes of Pumps 6" x 4 1/2" x 6"

1 1/2 cwt

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

Engine Room 2 @ 2" dia, one for 2" one aft

In Holds, &c.

one @ 2" dia,

Each compartment.

of Bilge Injections 1

sizes 3 1/2

Connected to condenser, or to circulating pump

CP.

Is a separate Donkey Suction fitted in Engine room & size

Yes, 3"

all the bilge suction pipes fitted with roses

Yes

Are the roses in Engine room always accessible

✓

Are the sluices on Engine room bulkheads always accessible

None

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

Yes

Are they Valves or Cocks

Both

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

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

hat pipes are carried through the bunkers

Forward Suctions.

How are they protected

Wood casings.

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

Yes

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

Yes

the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

✓

worked from

ILERS, & Co.—(Letter for record

S)

Manufacturers of Steel

Mannesmann-Rohrwerke, Huelshorn

total Heating Surface of Boilers

1698 sq

Is Forced Draft fitted

ho

No. and Description of Boilers

One single ended

orking Pressure

200

Tested by hydraulic pressure to

350

Date of test

27.4.26.

No. of Certificate 3594.

in each boiler be worked separately

Area of fire grate in each boiler

49.2 sq ft.

No. and Description of Safety Valves to

ch boiler 2 Spring loaded

Area of each valve

4.9 sq

Pressure to which they are adjusted

200 lbs

Are they fitted with easing gear

Yes

smallest distance between boilers or uptakes and bunkers or woodwork

4"

Mean dia. of boilers

14.0"

Length

10.8"

Material of shell plates

Steel

thickness

1 1/2"

Range of tensile strength

28/32 Tons

Are the shell plates welded or flanged

✓

Descrip. of riveting: cir. seams

DR.

ng. seams

TR. 5/8"

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

8 7/8"

Lap of plates or width of butt straps

18 1/2"

er centages of strength of longitudinal joint

rivets

90.8

Working pressure of shell by rules

201

Size of manhole in shell

16" x 12"

ize of compensating ring

34 x 27 x 1 1/2"

No. and Description of Furnaces in each boiler

3 Plain

Material

Steel

Outside diameter

41"

length of plain part

top

76.80

bottom

69"

Thickness of plates

3 1/8"

bottom

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

219

Combustion chamber plates: Material

Steel

Thickness: Sides

3/4"

Back

23/32"

Top

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

huts

Working pressure by rules

230

Material of stays

Steel

Area at smallest part

2.04 sq

Area supported by each stay

18.45

Working pressure by rules

230

End plates in steam space:

Material

Steel

Thickness

1 1/8"

Pitch of stays

18"

How are stays secured

DN.W.

Working pressure by rules

220

Material of stays

Steel

Area at smallest part

4.5 sq

Area supported by each stay

324.0

Working pressure by rules

275

Material of Front plates at bottom

Steel

Thickness

15/16"

Material of Lower back plate

Steel

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

Steel

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

Steel

thickness of girder at centre

9 1/2" x 13 1/4"

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

✓

% of strength of joint

✓

Diameter

✓

Thickness of shell plates

✓

Material

✓

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Top end bolts + nuts. 2 Bottom end bolts + 2 main bearing bolts + nuts. Set of coupling bolts + nuts. Spare valves for air, feed, bilge + donkey pumps. Main + donkey check va Safety valve spring. Circulating pump impeller + spindle. Feed pump cam, gland + neck ring.

The foregoing is a correct description,

FOR CHARLES D. HOLMES & CO. LTD

Manufacturer.

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

1926.

Feb 14. Mar 4. 9. 17. 18. 22. Apr 14. 15. 21. 27. May 4. 17. June 9. July 15.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 14-4-26 Slides 21-4-26 Covers 14-4-26 Pistons 21-4-26 Rods 21-4-26 Connecting rods 21-4-26 Crank shaft 14-4-26 Thrust shaft 14-4-26 Tunnel shafts ✓ Screw shaft 9-3-26 Propeller 17-3-26 Stern tube 17-3-26. Steam pipes tested 17-5-26 Engine and boiler seatings 26-4-26 Engines holding down bolts 4-5-26 Completion of pumping arrangements 3-8-26 Boilers fixed 4-5-26. Engines tried under steam 3-8-26 Completion of fitting sea connections 26-4-26 Stern tube 26-4-26 Screw shaft and propeller 26-4-26 Main boiler safety valves adjusted 3-8-26 Thickness of adjusting washers F 5/16 A 11/32

Material of Crank shaft steel Identification Mark on Do. 220 RF. Material of Thrust shaft steel Identification Mark on Do. 220

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts steel Identification Marks on Do. 220

Material of Steam Pipes S. S. Copper, 4" Bore x 6W8. Test pressure 400 lbs per sq in

Is an installation fitted for burning oil fuel ho 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 TOURMALINE (Hull Rpt 370)

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 accuracy. The machinery is eligible in my opinion for the record in the Register Book.

Forge marks on shafting:— Screw shaft. Slings No. 12346 K.H. Crank shaft. Slings No. 684 2L. Thrust. Slings No. 687 JL. + 7550 J.P.

Forging reports will be forwarded later.

The amount of Entry Fee £ 2 : - : When applied for, 9 AUG 1926
Special ... £ 24 : - :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received, 1-9-26

Committee's Minute FRI. 13 AUG 1926 FRI. 27 AUG 1926

Assigned + L.M.C. 8.26 C.L.

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