

REPORT ON MACHINERY.

No. 16289.

Port of HullReceived at London Office 10th SEP 1904No. in Survey held at Hull
Reg. Book.Date, first Survey June 1stLast Survey Augst 20th 1904(Number of Visits 10)7th Supp. on theSteam Trawler "Japan"Tons { Gross 205
Net 78

Master

Built at SelbyBy whom built Bochane SonsWhen built 1904Engines made at HullBy whom made C. D. Holmes & Cowhen made 1904Boilers made at "By whom made "when made 1904

Registered Horse Power

Owners J. L. TaylorPort belonging to GrimsbeyNom. Horse Power as per Section 28 66Is Refrigerating Machinery fitted NoIs Electric Light fitted No

ENGINES, &c.—Description of Engines

Tri-CompoundNo. of Cylinders 3No. of Cranks 3Dia. of Cylinders 12" - 21" - 34"Length of Stroke 24"Revs. per minute 712

Dia. of Screw shaft

as per rule 7"Material of screw shaft Iron

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 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

If Yes

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

Length of stern bush 31"Dia. of main shaftas per rule 6.26

Dia. of Crank shaft journals

as per rule 6.58Dia. of Crank pin 6 3/4"Size of Crank webs 12 3/8" x 4 3/8"

Dia. of thrust shaft under

collars 6 3/4"Dia. of screw 8" - 6"Pitch of screw 11" - 6" - 10" - 6"No. of blades 4State whether moveable NoTotal surface 26 1/2 sq ftNo. of Feed pumps 1Diameter of ditto 2 1/2"Stroke 24"

Can one be overhauled while the other is at work

No. of Bilge pumps 1Diameter of ditto 2 1/2"Stroke 24"

Can one be overhauled while the other is at work

No. of Donkey Engines 1Sizes of Pumps 2 3/4" x 5"

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

In Engine Room Two 2"In Holds, &c. One 2" + one 2" to peakEjector suction in Eng. Room bilge, hold, and discharge on deckNo. of bilge injections 1sizes 2 3/4"Connected to condenser, or to circulating pump Air pumpIs a separate donkey suction fitted in Engine room & size EjectorAre all the bilge suction pipes fitted with roses YesAre the roses in Engine room always accessible YesAre the sluices on Engine room bulkheads always accessible NoneAre all connections with the sea direct on the skin of the ship YesAre they Valves or Cocks BothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YesAre the discharge pipes above or below the deep water line aboveAre they each fitted with a discharge valve always accessible on the plating of the vessel YesAre the blow off cocks fitted with a spigot and brass covering plate YesWhat pipes are carried through the bunkers Suction to holdHow are they protected wood casingAre all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yesWhen were stern tube, propeller, screw shaft, and all connections examined in dry dock now newIs the screw shaft tunnel watertight NoneIs it fitted with a watertight door worked from

BOILERS, &c.—

(Letter for record 8)Total Heating Surface of Boilers 1090 sq ftIs forced draft fitted NoNo. and Description of Boilers One Cyl. Multi.Working Pressure 180 lbsTested by hydraulic pressure to 360 lbsDate of test 11.8.04

Can each boiler be worked separately

Area of fire grate in each boiler 35 sq ft

No. and Description of safety valves to

each boiler Two SpringArea of each valve 3.976 sq inPressure to which they are adjusted 183 lbsAre they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 7"Mean dia. of boilers 12' - 0"Length 9' - 6"Material of shell plates SteelThickness 1"Range of tensile strength 39 tons

Are they welded or flanged

Descrip. of riveting: cir. seams lap. D. r.long. seams D. butt strap. J. R.Diameter of rivet holes in long. seams 1 3/32"Pitch of rivets 7 1/8"Lap of plates or width of butt straps 15"

Per centages of strength of longitudinal joint

rivets 84.4plate 85.5Working pressure of shell by rules 187 lbsSize of manhole in shell 16" x 12"Size of compensating ring 7" x 1"No. and Description of Furnaces in each boiler Two HolmesMaterial SteelOutside diameter 41"Length of plain part 15 1/2"Thickness of plates 1 1/2"crown 11"bottom 16"Description of longitudinal joint WeldedNo. of strengthening rings four

Corrugated

Working pressure of furnace by the rules 207 lbsCombustion chamber plates: Material SteelThickness: Sides 3 3/32"Back 1 1/2"Top 3 3/32"Bottom 3 3/32"Pitch of stays to ditto: Sides 9"Back 9"Top 8"If stays are fitted with nuts or riveted heads NutsWorking pressure by rules 214 lbsMaterial of stays SteelDiameter at smallest part 1 5/8"Area supported by each stay 76.5 sq inWorking pressure by rules 243 lbs

End plates in steam space:

Material SteelThickness 1 3/32"Pitch of stays 16"How are stays secured double nutsWorking pressure by rules 196 lbsMaterial of stays SteelDiameter at smallest part 2 3/32"Area supported by each stay 256 sq inWorking pressure by rules 225 lbsMaterial of Front plates at bottom SteelThickness 1 1/2"Material of Lower back plate SteelThickness 1 1/2"Greatest pitch of stays 15"Working pressure of plate by rules 180 lbsDiameter of tubes 3 1/4"Pitch of tubes 4 5/8"Material of tube plates SteelThickness: Front 3 7/32"Back 1 1/2"Mean pitch of stays 9 1/4"Pitch across wide water spaces 15"Working pressures by rules 180 lbsGirders to Chamber tops: Material Iron

Depth and

thickness of girder at centre 7 3/4" x 13 1/4"Length as per rule 28"Distance apart 8"Number and pitch of Stays in each Three x 7 1/2"Working pressure by rules 206 lbs

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

Lloyd's Register

Foundation

W 581-0126

W 581-0126

DONKEY BOILER— No. Description

Made at By whom made When made Where fixed
 Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves
 No. of safety valves Area of each Pressure to which they are adjusted 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 Rivets 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
 Thickness of furnace crown plates Stayed by Working pressure of shell by rules
 Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied:— Two each, top & bottom end, main bearing bolts, One set coupling bolts, One set feed pump valves, One set bilge pump valves, one set check valves, safety valve spring, & a quantity of assorted bolts & nuts etc.

The foregoing is a correct description,

Charles D. Holmes Manufacturer.

Dates of Survey while building { During progress of work in shops - 1904: Jun 1. 7. 17. 24. July 1. 5. 16 Aug 10. 19. 20.
 { During erection on board vessel - - -
 Total No. of s

Is the approved plan of main boiler forwarded herewith *Yes*
 " " " *donkey* " " "

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

The machinery and boiler of this vessel have been constructed under special survey and placed on board in accordance with the Society's Rules, and are now in our opinion in a good safe working condition, & respectfully submitted for the notification *L.M.C. 8.04* in the Register Book

It is submitted that this vessel is eligible for **THE RECORD** *L.M.C. 8.04*

ES.
20.9.04
30.9.04

Certificate (if required) to be sent to

The amount of Entry Fee.. £ 1 : : : When applied for,
 Special £ 9 : 18 : : 19/9/1904
 Donkey Boiler Fee £ - : - : :
 Travelling Expenses (if any) £ - : - : : 30/9/04

James Barclay
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

FRI. 23 SEP 1904

Committee's Minute

Assigned

+ L.M.C. 8.04

MACHINERY CERTIFICATE
 WRITTEN.



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 Foundation