

REPORT ON MACHINERY

TUE. 14 DEC. 1915

No. 7912.

Received at London Office

Date of writing Report 13 DEC 1915

When handed in at Local Office

13 DEC 1915

Port of

DUNDEE

No. in Survey held at

Dundee

Date, First Survey 25th Feb. 1915Last Survey 11th December 1915

Reg. Book.

(68) on the MACHINERY OF THE STEEL S.S. K. "ALIDA" (EX. "JACINTA")

(Number of Visits 18)

Tons { Gross 270
Net 105

Master CHARLES JOHNSON - 15 - Built at

Dundee

By whom built Dundee S.S. Co. Ltd.

YARD N° 275

When built 1915-12

Engines made at

Coalbridge

By whom made

Wm. Beardmore & Co. Ltd., Eng. N° 466

when made 1905

Boilers made at

Glasgow

By whom made

Dunsmuir & Jackson Ltd., BOILER N° 48

when made 1915

Registered Horse Power

Owners

James Watt & Sons, Ltd.

Port belonging to

Hutwood

Nom. Horse Power as per Section 28 87.55

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines Triple expansion surface condensing No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13", 22" & 36"

Length of Stroke 24"

Revs. per minute 116

Dia. of Screw shaft as per rule

Material of 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

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

yes

If two

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

yes

Length of stern bush 2'-9"

Dia. of Tunnel shaft as per rule

Dia. of Crank shaft journals as per rule

as fitted 7 1/2"

Dia. of Crank pin 7 1/2"

Size of Crank webs 4 3/4" x 4 1/2"

Dia. of thrust shaft under

collars 7 1/2"

Dia. of screw 9'-0"

Pitch of Screw 11'-6"

No. of Blades 4

State whether moveable

Total surface 34

#

No. of Feed pumps 1

Diameter of ditto 2 5/8"

Stroke 12"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 1

Diameter of ditto 2 5/8"

Stroke 12"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines 1

Sizes of Pumps 6" & 3" x 6"

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

In Engine Room Forward 1 @ 2": Aft 1 @ 2"

In Holds, &c. Fore peak 1 @ 2": Fish Room 1 @ 2":
and Fish Mill 1 @ 2"

No. of Bilge Injections 1

sizes 3 1/2"

Connected to condenser and circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

yes - 2"

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

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

none

How are they protected

yes

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

Dates of examination of completion of fitting of Sea Connections 1-12-15

of Stern Tube 1-12-15

Screw shaft and Propeller 1-12-15

Is the Screw Shaft Tunnel watertight

none

Is it fitted with a watertight door

yes

worked from

yes

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel

Total Heating Surface of Boilers 1542

#

Is Forced Draft fitted

no

No. and Description of Boilers 1, S.E. Cylindrical Multitubular

Working Pressure 200 lbs.

Tested by hydraulic pressure to 400 lbs.

Date of test 19-2-15

No. of Certificate 13085

Can each boiler be worked separately

yes

Area of fire grate in each boiler 54.75

#

No. and Description of Safety Valves to

each boiler 2-direct spring loaded

Area of each valve 4.91

Pressure to which they are adjusted 205 lbs.

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork 18"

INT

Mean dia. of boilers 13'-6"

Length 11'-0"

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space:

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Working pressure of plate by rules

Material of flue plates

Thickness

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Material of flue plates

Thickness

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

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

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

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

VERTICAL DONKEY BOILER—Manufacturers of Steel

No. *None fitted!* Description *None fitted!*

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 of Safety _____

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 _____ Rivets _____ Plates _____

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:—*2 top and 2 bottom end bolts & nuts, 2 main bearing bolts, 1 nut coupling bolts, 1 set feed and bge valves, assorted bolts and nuts, iron of various sizes, 6 condenser tubes and 12 funnels, 3 plain boiler tubes, and 1 spare propeller.*

The foregoing is a correct description,

H. S. Wilson.

Manufacturer.

WILLIAM BEARDMORE & CO., LIMITED.

Dates of Survey while building: During progress of work in shops—*1915*
During erection on board vessel—*FEB. 25, MAR. 4, JUNE 26, JULY 3, 6, 12, SEP. 4, 13, 23, 24, 25, 30 OCT. 21, NOV. 10, 22 DEC. 1, 8, 11.*
Total No. of visits *18.*

Is the approved plan of main boiler forwarded herewith *yes.*

Dates of Examination of principal parts—Cylinders _____ Slides _____ Covers _____ Pistons _____ Rods _____

Connecting rods _____ Crank shaft _____ Thrust shaft _____ Tunnel shafts _____ Screw shaft _____ Propeller _____

Stern tube _____ Steam pipes tested *25-9-15* Engine and boiler seatings *4-3-15* Engines holding down bolts *30-9-15*

Completion of pumping arrangements *8-12-15* Boilers fixed *8-12-15* Engines tried under steam *8-12-15*

Main boiler safety valves adjusted *30-9-15* Thickness of adjusting washers *Port 1/4" Starboard 3/8"*

Material of Crank shaft *Steel* Identification Mark on Do. *4009 W.D.H.* Material of Thrust shaft *Steel* Identification Mark on Do. *4009 F.A.F.*

Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shafts *Iron* Identification Marks on Do. *4009 W.D.H.*

Material of Steam Pipes *Seamless Copper* ✓ Test pressure *400 lbs.* ✓

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

The machinery of this vessel has now been on board in accordance with the Society's rules, examined under full working conditions and found satisfactory, and eligible, in my opinion, to bear record of + LMC 12.15.

Note:—For full particulars of engines and boiler see Glasgow Reports No. 35430 & 34893

It is submitted that this vessel is eligible for THE RECORD + LMC 12.15.

J.R.R.

J.W.D.
16/12/15.

The amount of Entry Fee .. £ _____ : When applied for, _____
Special .. £ _____ : _____
Donkey Boiler Fee .. £ _____ : _____
Traveling Expenses (if any) £ _____ : _____

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

Committee's Minute *FRI. DEC. 17. 1915*

Assigned

+ L.M.C. 12.15

MACHINERY CERTIFICATE



© 2020

Lloyd's Register Foundation