

## REPORT ON MACHINERY.

No. 74157

Received at London Office 4 MAR 1921

Date of writing Report

19

When handed in at Local Office

19

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at  
Reg. Book.

Newcastle-on-Tyne

Date, First Survey

Last Survey

19

on the

(Number of Visits)

Tons <sup>Gross</sup>  
Net

Master

Built at

By whom built

When built

Engines made at

Wallsend-on-Tyne

By whom made

Parramatta Steam Turbine Co. (Limited) 1921

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Shaft Horse Power at Full Power

1350

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

## TURBINE ENGINES, &amp;c.—Description of Engines

Double Reduction Gearing Turbine (Impulse Reaction) No. of Turbines 2

Diameter of Rotor Shaft Journals, H.P.

3 1/2"

L.P.

4 1/2"

Diameter of Pinion Shaft

Same as bearing diameter.

Diameter of Journals

1st Red: 3"

Distance between Centres of Bearings

Primary 1'-5"

Diameter of Pitch Circle

Diameter of Wheel Shaft Journals

2nd Red: 7"

Distance between Centres of Bearings

Secondary 3'-6"

Main 4'-0"

Diameter of Pitch Circle of Wheel

Width of Face

Primary 7"

Diameter of Thrust Shaft under Collars

✓

Diameter of Tunnel Shaft

No. of Screw Shafts

Diameter of same

as per rule

Diameter of Propeller

Pitch of Propeller

No. of Blades

State whether Moveable

Total Surface

Diameter of Rotor Drum, H.P.

L.P.

astern

Thickness at Bottom of Groove, H.P.

1"

L.P.

1"

Astern 1"

Revs. per Minute at Full Power, Turbine

Propeller 70

## PARTICULARS OF BLADING.

H.P.

L.P.

ASTERN.

	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1ST EXPANSION	7/8"			1 1/16"			H.P. Ast. Incorporated in H.P. Cylinder		
2ND									
3RD	to						LP "	"	LP "
4TH									
5TH	1 3/8"			to					
6TH									
7TH									
8TH				4 1/2"					

No. and size of Feed pumps

No. and size of Bilge pumps

No. and size of Bilge suction in Engine Room

In Holds, &amp;c.

No. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine Room &amp; size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room 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

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

## BOILERS, &amp;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

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: ctr. 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

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

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

Pitch 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

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

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

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diameter of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates: Thickness

How stayed

W437-0013



