

REPORT ON MACHINERY.

No. 29325.

Received at London Office

Date of writing Report

19

When handed in at Local Office

10-11-1914

Port of

Glasgow

No. in Survey held at
Reg. Book.Date, First Survey 9th Sept. 1918. Last Survey 29th Oct 1919

on the

S.S. WARHINDOO

(Standard Z)

Tons } Gross
Net

Master Built at Glasgow By whom built W Hamilton & Co Ltd (No 371) When built 1919

Engines made at Glasgow By whom made W Rowan & Co Ltd (No 318) when made 1919

Boilers made at Do By whom made Do (No 718) when made 1919

Registered Horse Power Owners Shipping Controller Port belonging to London

Nom. Horse Power as per Section 28 517 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 27-44-73 Length of Stroke 48 Revs. per minute 81 Dia. of Screw shaft as per rule 14.7 as fitted 15.2 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 Yes If two

liners are fitted, is the shaft lapped or protected between the liners — Length of stern bush 5-0 1/2

Dia. of Tunnel shaft as per rule 13.3 as fitted 13.2 Dia. of Crank shaft journals as per rule 14 as fitted 14.2 Dia. of Crank pin 14 1/2 Size of Crank webs 28x9 Dia. of thrust shaft under

collars 14 3/4 Dia. of screw 17-6 Pitch of Screw 16-6 No. of Blades 4 State whether moveable No Total surface 98.2 ft

No. of Feed pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 3 Sizes of Pumps 1 Ballast 10 1/2 x 14 x 24 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room (2) 3 1/2 " 80 Gal (3) 3 1/2 " 9 Gal 9 1/2 x 7 x 18 In Holds, &c. aft hold (2) 3 1/2 " Tunnel well (1) 3 1/2 "

Cross bunker (2) 3 1/2 " No. of Bilge Injections 1 sizes 12 Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2 "

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 No

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 Below

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 4 suction How are they protected Wood casings

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 19/9/19 of Stern Tube 19/9/19 of Screw shaft and Propeller 29/9/19

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from trunkway access from deck

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Steel 60 of Scotland Ltd

Total Heating Surface of Boilers 7668 ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Single ended

Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 21.8.19 No. of Certificate 14864

Can each boiler be worked separately Yes Area of fire grate in each boiler 63.33 ft No. and Description of Safety Valves to

each boiler 2 Spring loaded Area of each valve 9.60 Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 1-6 Mean dia. of boilers 15-6 Length 11-6 Material of shell plates Steel

Thickness 1 1/4 Range of tensile strength 25432 lb Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap

long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 9 1/8 Lap of plates or width of butt straps 19 1/2

Per centages of strength of longitudinal joint rivets 85.3 plate 85.6 Working pressure of shell by rules 183 Size of manhole in shell 16 x 12

Size of compensating ring and flange No. and Description of Furnaces in each boiler 3 Corrugated Material Steel Outside diameter 4-2 3/8

Length of plain part top 19 bottom 32 Thickness of plates crown 19 bottom 32 Description of longitudinal joint Welded No. of strengthening rings —

Working pressure of furnace by the rules 188 Combustion chamber plates: Material Steel Thickness: Sides 3/32 Back 1/16 Top 3/32 Bottom 3/32

Pitch of stays to ditto: Sides 10 5/8 x 9 1/4 Back 10 1/4 x 8 3/4 Top 10 5/8 x 9 1/4 If stays are fitted with nuts or riveted heads No Working pressure by rules 180

Material of stays Steel Diameter at smallest part 2.395 Area supported by each stay 98.0 Working pressure by rules 219 End plates in steam space:

Material Steel Thickness 1 3/32 Pitch of stays 21 3/4 x 20 1/2 How are stays secured Nuts Working pressure by rules 181 Material of stays Steel

Diameter at smallest part 8.29 Area supported by each stay 445.0 Working pressure by rules 198 Material of Front plates at bottom Steel

Thickness 7/8 Material of Lower back plate Steel Thickness 3/32 Greatest pitch of stays 13 5/8 Working pressure of plate by rules 187

Diameter of tubes 2 3/4 Pitch of tubes 4 x 3 3/8 Material of tube plates Steel Thickness: Front 3/32 Back 3/4 Mean pitch of stays 9 5/8

Pitch across wide water spaces 13 5/8 Working pressures by rules 181 Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 10 x 7/8 (2) Length as per rule 35 9/16 Distance apart 10 5/8 Number and pitch of stays in each (3) 9 1/4

Working pressure by rules 188 Superheater or Steam chest; how connected to boiler None 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

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