

REPORT ON MACHINERY.

No. 40643

WED. DEC. 11, 1920

Received at London Office

Date of writing Report 29. 11. 1920 When handed in at Local Office 29. 11. 1920 Port of Glasgow
No. in Survey held at Dumbarton Date, First Survey Oct 17th 1918. Last Survey Nov 26th 1920
Reg. Book. on the S.S. "Hibernia" (Number of Visits 68) Gross 3458 Tons Net 1408
Master Built at Dumbarton By whom built Wm Denny & Bros Ltd (1035) When built 1920
Engines made at Dumbarton By whom made Wm Denny & Bros Ltd (818) when made 1920
Boilers made at Dumbarton By whom made Wm Denny & Bros Ltd (818) when made 1920
Registered Horse Power 2714 Owners not Rev. R. Boyle Port belonging to Dublin
Shaft Horse Power at Full Power 14000 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

TURBINE ENGINES, &c.—Description of Engines Parsons' Single geared Turbine No. of Turbines 2 H.P. 2 L.P.
Diameter of Rotor Shaft Journals, H.P. 6" L.P. 8" Diameter of Pinion Shaft 7"
Diameter of Journals 7" Distance between Centres of Bearings 38" Diameter of Pitch Circle H.P. 9.09 L.P. 11.16
Diameter of Wheel Shaft 13" Distance between Centres of Bearings 6" 6 1/2" Diameter of Pitch Circle of Wheel 72.46
Width of Face 49" Diameter of Thrust Shaft under Collars 12 1/2" Diameter of Tunnel Shaft as per rule 12" as fitted 12"
No. of Screw Shafts 2 Continuous Lines as per rule 13 1/4 as fitted 13 1/4 Diameter of Propeller 9-6" Pitch of Propeller 11' 0"
No. of Blades 3 State whether Moveable no Total Surface 32 1/2 Diameter of Rotor Drum, H.P. 16 1/2 L.P. 47" as stern 33"
Thickness at Bottom of Groove, H.P. Solid L.P. Astern Revs. per Minute at Full Power, Turbine H.P. 2232 L.P. 1816 Propeller 280

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									
2ND									
3RD									
4TH									
5TH									
6TH									
7TH									
8TH									

No. and size of Feed pumps (3) 10" x 26"

No. and size of Bilge pumps (2) 8 x 9 x 10"

No. and size of Bilge suction in Engine Room Port (1) 3" S (1) 3" Cent (1) 3" in each stokehold (2) 3"

In Holds, &c. (1) in each 3"

No. of Bilge Injections 5 (3 in Boiler Room) 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 all connections with the sea direct on the skin of the ship? yes Are they Valves or Cocks both yes
Are they sized 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? ✓
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
Is the Screw Shaft Tunnel watertight? yes Is it fitted with a watertight door? yes worked from upper platform

BOILERS, &c.—(Letter for record (5) Manufacturers of Steel D. Colvile & Sons
Total Heating Surface of Boilers 33916 1/2 Is Forced Draft fitted? yes No. and Description of Boilers 9 Water Tube (2) 13" (7) 28" wide
Working Pressure 200 Tested by hydraulic pressure to 400 Date of test 10/2/20 27/2/20 No. of Certificate 15032 15116 15155
Can each boiler be worked separately? yes Area of fire grate in each boiler (28 inch) (12 1/2) (23 inch) (105) No. and Description of Safety Valves to
each boiler 23 " 2 " 3 " Area of each valve 7.672 " Pressure to which they are adjusted 205 " 25-18-1 1/2 Are they fitted with easing gear? yes
Smallest distance between boilers or uptakes and bunkers or woodwork well clear Mean dia. of boiler 3-0 Length 23-15-2 1/4 Material of shell plates steel
Thickness 7/16 " Range of tensile strength 26 to 30 tons Are the shell plates welded or flanged? no Descrip. of riveting: cir. seams double lap
long, seams double butt Diameter of rivet holes in long. seams 23/32 Pitch of rivets 3-42 3-133 Lap of plates or width of butt straps 8 1/2

Per centages of strength of longitudinal joint rivets 98% plates 77% Working pressure of shell by rules 218 Size of manhole in end 15 x 11"

Size of compensating ring flanged No. and Description of Furnaces in each Boiler one Material Outside diameter

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

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom Working pressure by rules

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 Front plates at bottom

Diameter at smallest part Area supported by each stay Working pressure by rules Working pressure of plate by rules

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes 3 1/2 " 1 1/2 " Pitch of tubes 7" Material of tube plates steel Thickness: Front 7/8 " 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 none % of strength of joint Diameter of rivet holes Pitch of rivets

Thickness of shell plates Material Description of longitudinal joint How stayed

Working pressure of shell by rules Crown plates: Thickness

