

# REPORT ON MACHINERY

No 45293

13 JAN 1926

Report of 30<sup>th</sup> Dec 1925 When handed in at Local Office 30.12.25 Port of Glasgow.  
 Survey held at Blydebank Date, First Survey 9.7.25 Last Survey 29<sup>th</sup> Dec. 1925  
 the Ship Triple Screw steamer "St David" Visits  
 Tons { Gross 2457  
 Net 1006  
 Built at Blydebank By whom built John Brown & Co. Ltd. When built 1906-8  
 Made at Blydebank By whom made John Brown & Co. Ltd. when made 1925  
 Laid at Blydebank By whom laid John Brown & Co. Ltd. when made 1906  
 Horse Power 1303 Owners Fishguard & Rosslare Port belonging to London  
 Sea Power at Full Power 6000 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Engines, &c.—Description of Engines S. R. Brown - Curtis No. of Turbines 3  
 Rotor Shaft Journals, H.P. 4 1/2" L.P. 6" Diameter of Pinion Shafts 5 3/4"  
 Journals 6 3/4" Distance between Centres of Bearings 3' 1 1/2" Diameter of Pitch Circle 9' 8 1/2"  
 Wheel Shaft 8 1/2" Distance between Centres of Bearings 3' 4 1/2" Diameter of Pitch Circle of Wheel 60' 2"  
 24" Diameter of Thrust Shaft under Collars 8 1/2" Diameter of Tunnel Shaft as per rule  
 Shafts 3 Diameter of same as fitted Diameter of Propeller Pitch of Propeller  
 State whether Moveable Total Surface Diameter of Rotor Drum, H.P. L.P. Astern  
 Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power, Turbine 2400 Propeller 395

## DETAILS 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.

of Feed pumps  
 of Bilge pumps  
 of Bilge suction in Engine Room  
 In Holds, &c.  
 Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size  
 Bilge suction pipes fitted with roses Are the roses in Engine room always accessible  
 Connections with the sea direct on the skin of the ship Are they Valves or Cocks  
 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  
 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  
 e carried through the bunkers How are they protected  
 Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
 Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges  
 Shaft Tunnel watertight Is it fitted with a watertight door worked from  
 S, &c.—(Letter for record Manufacturers of Steel  
 ing Surface of Boilers Is Forced Draft fitted No. and Description of Boilers  
 Pressure Tested by hydraulic pressure to Date of test No. of Certificate  
 or be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to  
 Area of each water Pressure to which they are adjusted Are they fitted with rising gear  
 nce between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates  
 Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams  
 Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps  
 of strength of longitudinal joint Working pressure of shell by rules Size of manhole in shell  
 asating ring No. and Description of Furnaces in each Boiler Material Outside diameter  
 in part Thickness of plates Description of longitudinal joint No. of strengthening rings  
 sure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom  
 lo ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules  
 us Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space  
 Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays  
 smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom  
 Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
 tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays  
 wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and  
 order at centre Length as per rule Distance apart Number and pitch of stays in each  
 sure by rules Steam dome: description of joint to shell % of strength of joint Diameter  
 shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets  
 sure of shell by rules Crown plates: Thickness How stayed

W569-0095



SUPERHEATER. Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_  
Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,  
*John Brown & Company, Limited*  
Manufacturers,  
Glasgow Secretary.

Dates of Survey while building  
During progress of work in shops  
During erection on board vessel  
Total No. of visits

1925 July 9 Aug 3.6.20.25 Sept. 8.10.16.21.24.29 Oct. 2.5.8.19.21.22.26.30 Nov 6.11.12.16.19.26.30  
Dec. 3.7.10.11.14.15.22.24.29.  
36.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings 24.9.25 Rotors 5.10.25 Blading 16.9.25 Gearing 16.9.25

Rotor shaft 19.10.25 Thrust shaft 22.10.25 Tunnel shafts ✓ Screw shaft ✓ Propeller ✓

Stern tube ✓ Steam pipes tested ✓ Engine and boiler seatings 30.10.25 Engines holding down bolts 11.12.25

Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam 29.12.25

Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓

Material and tensile strength of Rotor shaft 8all 36.38 Identification Mark on Do. P.L.P. 3130. H.P. 3051.

Material and tensile strength of Pinion shaft 8all 42.45 Identification Mark on Do. S.L.P. 3216. 3079.3082.3080

Material of Wheel shaft 8 Identification Mark on Do. H.P. 3030. S.L.P. 3031. P. 3282. C. 3283. S. 3284.

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts ✓ Identification Marks on Do. ✓

Material of Steam Pipes ✓ Test pressure ✓

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of Section 49 of the Rules been complied with ✓

Is this machinery a duplicate of a previous case No If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) These Engines have been built under special survey in accordance with the Society's Rules and requirements, the materials, and workmanship are good, they have been securely fitted on board, and satisfactorily tried under steam and in my opinion eligible for the record + N.E. 12.25.

The amount of Entry Fee £ 50.0.0 When applied for, 8.1.26.  
FITTING OUT Special £ 10.0.0  
Donkey Boiler Fee £ : :  
Travelling Expenses (if any) £ : :  
When received, 26.1.26.

Committee's Minute GLASGOW 12 JAN 1926  
Assigned + NE 12.25

Jas. Cairns  
Engineer Surveyor to Lloyd's Register of Shipping.