

Engines & Gearing for
Standard Engines, forwarded to National Yard, Chelston.

st. 4a.

REPORT ON MACHINERY.

No. 71532

Received at London Office WED. JAN. 15. 1919

Date of writing Report 29th Oct. 1918 When handed in at Local Office 19 Port of NEWCASTLE
No. in Survey held at Newcastle Date, First Survey 29th Apr 1918 Last Survey 19
Reg. Book. on the S/S Monte Pasubio ex War Glory (Number of Visits)
Master Built at Chelston By whom built The Ironmouth S B Co When built
Engines made at Newcastle By whom made Parsons Marine Steam Turbine Co. 164 when made 1918
Boilers made at Rinfrew By whom made Babcock Wilcox & Co Ltd when made 1918
Registered Horse Power Owners The Shipping Controller Port belonging to London
Shaft Horse Power at Full Power 2900 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted Yes

TURBINE ENGINES, &c.—Description of Engines Geared Turbines No. of Turbines 2
Diameter of Rotor Shaft Journals, H.P. 4 1/2" L.P. 4 1/2" Diameter of Pinion Shaft 1st gear 4 1/2", 2nd gear 9"
Diameter of Journals 1st 4 1/2", 2nd 9" Distance between Centres of Bearings 1st 2'-3", 2nd 3'-10 1/2" Diameter of Pitch Circles 1st 6'-29", 2nd 13'-55 1/8"
Diameter of Wheel Shafts 1st 9", 2nd 14 3/4" Distance between Centres of Bearings 1st 2'-2", 2nd 3'-9 1/2" Diameter of Pitch Circle of Wheel 349.666" 476.584"
Width of Faces 1st 2'-7 1/2", 2nd 2'-2-15" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule.
No. of Screw Shafts Diameter of same as fitted Diameter of Propeller Pitch of Propeller
No. of Blades State whether Moveable Total Surface Diameter of Rotor Body H.P. 24 1/2"-26 1/4" L.P. 22 1/2" 30" Astern 42 1/2" 51 3/4"
Thickness at Bottom of Groove, H.P. Solid L.P. Solid Astern Solid Revs. per Minute at Full Power, Turbine 3500 Propeller 78 L.P. 24 1/2"-25 3/4"-20"

ARTICULARS OF BLADING.

	H.P. Impulse			L.P. Reaction			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	1" 4 1/16"	29 1/4" 29 15/16"	2	2 1/8"	26 1/4"	2	1 1/4" 2"	29 1/2" 30 1/4"	2
2ND	3/4"	29"	1	2 5/8"	27 1/4"	2	L.P. Astern		
3RD	1"	29 1/4"	1	3 1/4"	28 1/4"	2	1 st Impulse 2 3/4"	30 1/8"	1
4TH	1 3/8"	29 5/8"	1	2 3/8"	34 3/4"	1	2 nd do 4 1/8"	32"	1
5TH	1 7/8"	30 1/8"	1	2 7/8"	35 3/4"	1	1 st Reaction 1 3/4"	23 1/2"	1
6TH	2 1/2"	31 3/4"	1	3 1/2"	37"	1	2 nd do 1 1/2"	25"	1
7TH				4 1/4"	38 1/2"	3	3 rd do 3 1/2"	27"	3
8TH									

No. and size of Feed pumps
No. and size of Bilge pumps
No. and size of Bilge suction in Engine Room In Holds, &c.
No. of Bilge Injections sizes Connected to condenser, or to circulating pump. Is a separate Donkey Suction fitted in Engine Room & 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, &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: 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
bottom Thickness of plates bottom
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 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 Mean pitch of stays
Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays Depth and
Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material
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 Pitch of rivets
Thickness of shell plates Material Description of longitudinal joint Diameter of rivet holes
Working pressure of shell by rules Crown plates: Thickness How stayed

W699-0050

Lloyd's Register
Foundation

SUPERHEATER.

Type

Date of Approval of Plan

Date of Test

Tested by Hydraulic Pressure to

Diameter of Safety Valve

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

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,

FOR THE PARSONS MARINE STEAM TURBINE CO. LTD.

Manufacturer.

J. Walker

1918

Dates of Survey while building

During progress of work in shops --
During erection on board vessel --
Total No. of visits

Apr. 29. May 14. 22. Jun 19. Jul 5. 10. 16. 18. 22. 26. Aug. 2. 13. 15. 29. Sep. 6. 12. 17. 23. Oct. 3.

23

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Casings. 23. 9. 18 Rotors 23. 9. 18 Blading 11. 10. 18 Gearing 23. 9. 18

Rotor shafts 23. 9. 18 Thrust shaft Tunnel shafts Screw shaft Propeller

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

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Material and tensile strength of Rotor shafts Steel 35-38.2 tons Identification Mark on Do. J. X. 9-18

Material and tensile strength of Pinion shaft Nickel Steel 42.8 to 47.2 tons Identification Mark on Do. J. X. 9-18

Material of Wheel shafts Steel Identification Mark on Do. J. X. 9-18 Material of Thrust shaft Identification Mark on Do.

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 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 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. These turbines & gearing have been constructed under special survey & the materials & workmanship are found to be good; they have been tried under steam in the erecting shop & found satisfactory

Also fitted on Ss Monte Pasubio ex War Glory.
See Rept Report No 19836

Thos. B. Lomax
23/4/20.

The amount of Entry Fee ... £
Special ... £ 142-14-0
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

When applied for, 25/5/20.
When received, 16/6/20.

Thomas Field
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. MAY. 14 1920

Assigned

See First Entry report



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