

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

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 April 1918 Last Survey 19

on the S/S Monte Pasubio ex War Glory (Number of Visits 1) Tons Gross Net

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 Ranfrew By whom made Baloch Wilson & Co Ltd when made 1918

Registered Horse Power Owners The Shipping Controller Soc. for War Abandonment Purposes 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 13.558"

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 Circles of Wheels 349.666" & 76.584"

Width of Faces 1st 2-7 1/2", 2nd 2-15" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft

No. of Screw Shafts Diameter of same as per rule as fitted Diameter of Propeller Pitch of Propeller

No. of Blades State whether Moveable Total Surface Diameter of Rotor Body 24 1/2" L.P. 22 3/8" Astern 18 1/2" L.P. 15 3/8"

Thickness at Bottom of Groove, H.P. Solid L.P. Solid Astern Solid Revs. per Minute at Full Power, Turbine 3500 Propeller 78

ARTICULARS OF BLADING.

H.P. Impulse **L.P. Reaction**

	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" & 1 1/16"	29 1/8" & 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 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 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

FOR THE PARSONS MARINE STEAM TURBINE CO. LIMITED
P. ASTERN, Director

See Haupt Report. No 19836

© 2020 Lloyd's Register Foundation

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,

FOR THE PARSONS MARINE STEAM TURBINE CO. LTD.

J. Walker
 1918
 DIRECTOR

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } *Apr. 29. May 11. 22. Jun 19. Jul 5. 10. 16. 18. 22. 26. Aug. 2. 15. 15. 29. Sep. 6. 12. 17. 23. Oct. 3.*
 { During erection on board vessel --- } *11. 22. 25. 26.*
 Total No. of visits *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 Hs Mv's Pacific & War Glory.
 See Dept Report No 19836*

John A. Tomlinson
 23/4/20.

The amount of Entry Fee ... £	When applied for,
Special <i>£ 142-14=0</i>	<i>25/5/20</i>
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) £	<i>16/6/20</i>

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

Committee's Minute

FRI. MAY. 14 1920

Assigned

See First Entry report



© 2020

Lloyd's Register Foundation

Walker tube boiler