

REPORT ON MACHINERY.

No. 64211

Received at London Office

SAT. MAY 17. 1913

Date of writing Report 8th May 1913 When handed in at Local Office MAY 8 1913 Port of NEWCASTLE - ON - TYNE

No. in Survey held at Newcastle Date, First Survey 30th Nov 1911 Last Survey 5th May 1913

Reg. Book. on the S.S. "Kareos" (Number of Visits 81) Tons { Gross 6127 Net 3941

Master Built at Newcastle By whom built Palmer's Co When built 1913

Engines made at Newcastle By whom made Palmer's Co No. 825 when made 1913

Boilers made at do By whom made do when made 1913

Registered Horse Power Owners Bucknall Steamship Lines Ltd Port belonging to North Shields

Nom. Horse Power as per Section 28 601 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 25 1/2 - 43 1/2 - 76 Length of Stroke 51 Revs. per minute 73 Dia. of Screw shaft as per rule 15.6 Material of Steel

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 yes 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 yes Length of stern bush 6.0

Dia. of Tunnel shaft as per rule 14.2 Dia. of Crank shaft journals as per rule 14.91 Dia. of Crank pin 15.4 Size of Crank webs 21 3/4 x 10 Dia. of thrust shaft under

collars 15.4 Dia. of screw 18.6 Pitch of Screw 17.9 No. of Blades 4 State whether moveable yes Total surface 115.4

No. of Feed pumps 2 (Units) Diameter of ditto 4 1/2 x 8 Stroke 24 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 27 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 10 x 10 x 10 + 10 x 6 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Four 3 1/2 In Holds, &c. No. 1 hold 2.3 1/2 No. 2 hold 2.3 1/2

No. 3 hold 2.3 1/2 deep tank 2.3 1/2 No. 4 hold 2.3 1/2 No. 5 hold well 1.3 1/2 Tunnel Well 1.3 1/2

No. of Bilge Injections 1 sizes 8 1/2 Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 6

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 none

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 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

Dates of examination of completion of fitting of Sea Connections 19-3-13 of Stern Tube 19-3-13 Screw shaft and Propeller 19-3-13

Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top platform

BOILERS, &c. — (Letter for record S) Manufacturers of Steel J. H. & Sons & Palmer's Co

Total Heating Surface of 2 Boilers 5440 sq ft Is Forced Draft fitted yes No. and Description of Boilers 2, 3 single-ended

Working Pressure 220 lbs Tested by hydraulic pressure to 440 lbs Date of test 18-12-12 No. of Certificate 8424

Can each boiler be worked separately yes Area of fire grate in each boiler 73.75 sq ft No. and Description of Safety Valves to

each boiler 2, Spring Area of each valve 8.29 sq in Pressure to which they are adjusted 220 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 9.0 Mean dia. of boilers 15.7 1/2 Length 12.0 Material of shell plates Steel

Thickness 1 1/16 Range of tensile strength 32.35 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams 8. Lap

long. seams SBS Y. Rivet Diameter of rivet holes in long. seams 1 1/32 Pitch of rivets 10 Lap of plates on width of butt straps 23

Per centages of strength of longitudinal joint rivets 2.5 Working pressure of shell by rules 258 lbs Size of manhole in shell 16 x 12

Size of compensating ring McNeil No. and Description of Furnaces in each boiler 4. Inversion Material Steel Outside diameter 43 1/2

Length of plain part Thickness of plates Description of longitudinal joint Welded No. of strengthening rings

Working pressure of furnace by the rules 245 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/16 Back 23/32 Top 1 1/16 Bottom 1 1/8

Pitch of stays to ditto: Sides 8 3/4 x 7 3/4 Back 8 1/2 x 8 1/2 Top 8 1/2 x 7 3/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 246 lbs End plates in steam space:

Material of stays Steel Diameter at smallest part 2.03 Area supported by each stay 74.3 Working pressure by rules 234 lbs Material of stays Steel

Material Steel Thickness 1 1/32 Pitch of stays 23 x 17 How are stays secured Sn & W Working pressure by rules 260 lbs Material of Front plates at bottom Steel

Diameter at smallest part 9.82 Area supported by each stay 391 Working pressure by rules 260 lbs Material of Front plates at bottom Steel

Thickness 1 Material of Lower back plate Steel Thickness 15/16 Greatest pitch of stays 14 Working pressure of plate by rules 224 lbs

Diameter of tubes 2 1/2 Pitch of tubes 3 3/4 x 3 5/8 Material of tube plates Steel Thickness: Front 1 Back 7/8 Mean pitch of stays 7 3/8

Pitch across wide water spaces 13 Working pressures by rules 228 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 9 3/4 x 15 1/2 Length as per rule 33 1/8 Distance apart 8 5/8 Number and pitch of stays in each 3-7 3/4

Working pressure by rules 227 lbs 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

Lloyd's Register
w 488-0152

