

REPORT ON MACHINERY.

No. 9260

-7 JAN 1925

Received at London Office

Date of writing Report Dec 27 1924 When handed in at Local Office Jan 5 1925 to Port of Belfast
No. in Survey held at Belfast Date, First Survey June 6th 1924 Last Survey Jan 6th 1925
Reg. Book. on the New Steel S.S. "Antinous" (Number of Voids 50)
Master Built at Belfast By whom built Workman Clark & Co Ltd (45) Tons Gross 4563 Net 2854
Engines made at Belfast By whom made Workman Clark & Co Ltd (45) When built 1924-5
Boilers made at Belfast By whom made Workman Clark & Co Ltd (45) when made 1924-5
Registered Horse Power Owners New Egypt & Levant Shipping Co Ltd Port belonging to London.
Nom. Horse Power as per Section 28 423 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders Three

No. of Cranks Three

Dia. of Cylinders 26 x 42 x 41 Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft as per rule 14.46 as fitted 15.0 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 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 If two liners are fitted, is the shaft lapped or protected between the liners

Dia. of Tunnel shaft as per rule 12.9 as fitted 13.4 Dia. of Crank shaft journals as per rule 12.54 as fitted 13.4 Dia. of Crank pin 14 Size of Crank webs 8 7/8 x 26 1/2 Dia. of thrust shaft under collars 13 3/4 Dia. of screw 18-3 Pitch of Screw 1 1/4-3 No. of Blades 4 State whether moveable no Total surface 100

No. of Feed pumps Two Diameter of ditto 4 1/4 Stroke 21-0 Can one be overhauled while the other is at work yes

No. of Bilge pumps Two Diameter of ditto 4 1/4 Stroke 21-0 Can one be overhauled while the other is at work yes

No. of Donkey Engines 4 Sizes of Pumps 2 Weir 4 x 9 1/2 x 21 1 1/2 x 10 1/2 1 1/2 x 10 1/2 1 1/2 x 10 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 3 @ 3" direct 1 @ 4 1/2" direct 13" Suction 30" in hull In Holds, &c. No. 1-2 @ 3"; No. 3 2 @ 3"

No. of Bilge Injections One sizes 9" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 4 1/2"

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 yes

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 Bilge suction How are they protected wood casings

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 top platform

BOILERS, &c.—(Letter for record 5)

Manufacturers of Steel

Phoenix & Co

Londons

Total Heating Surface of Boilers 1146 Is Forced Draft fitted no No. and Description of Boilers Three Single ended (3.5E)

Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 4-11-24 No. of Certificate 849

Can each boiler be worked separately yes Area of fire grate in each boiler 63 1/4 No. and Description of Safety Valves to each boiler Two spring loaded Area of each valve 5-9 1/4 High Lift Pressure to which they are adjusted 185 lbs Are they fitted with casing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 2-0 Mean dia. of boilers 15-6 Length 11-6 Material of shell plates Steel

Thickness 1 1/4 Range of tensile strength 78 to 32 lbs Are the shell plates welded or flanged no Descrip. of riveting: cir. seams DR.

long. seams T.R.D.P.S. Diameter of rivet holes in long. seams 1 1/4 Pitch of rivets 8 13/16 Lap of plates or width of butt straps 18 5/8

Per centages of strength of longitudinal joint rivets 85.8 Working pressure of shell by rules 181 lbs Size of manhole in shell 16 x 12

Size of compensating ring 2-9 3/4 x 1 1/4 No. and Description of Furnaces in each boiler 3 corr Material Steel Outside diameter 4-1 1/4

Length of plain part top 19 bottom 32 Thickness of plates crown 19 bottom 32 Description of longitudinal joint weld No. of strengthening rings none

Working pressure of furnace by the rules 184 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/6 Back 1 1/6 Top 1 1/6 Bottom 1 1/6

Pitch of stays to ditto: Sides 8 x 9 Back 9 1/4 x 9 1/4 Top 8 x 10 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 184 lbs

Material of stays Steel Area at smallest part 1.13, 2.03 Area supported by each stay 84.44 Working pressure by rules 184 lbs End plates in steam space: Material Steel Thickness 1 3/8 Pitch of stays 19 1/4 x 21 1/2 How are stays secured D. Nuts Working pressure by rules 184 lbs Material of stays Steel

Area at smallest part 6.66 Area supported by each stay 38.44 Working pressure by rules 184 lbs Material of Front plates at bottom Steel

Thickness 3 3/8 Material of Lower back plate Steel Thickness 3 3/8 Greatest pitch of stays 15 1/6 x 8 Working pressure of plate by rules 184.5

Diameter of tubes 3 1/4 Pitch of tubes 4 3/8 x 4 3/8 Material of tube plates Steel Thickness: Front 3 1/8 Back 1 3/8 Mean pitch of stays 11 3/8

Pitch across wide water spaces 14 1/4 x 8 3/4 Working pressures by rules 202 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 @ 10 x 3 1/4 Length as per rule 2-11 1/2 Distance apart 10 Number and pitch of stays in each 3 @ 8

Working pressure by rules 182.5 Steam dome: description of joint to shell none % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type none

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

