

Rpt. 4.

REPORT ON MACHINERY

NEWCASTLE ON TYNE No. 69255

No. 15044
WED. 6 SEP. 1916
FRI. 13 OCT. 1916

Date of writing Report 29.8.16 When handed in at Local Office 19 Port of Leith

No. in Survey held at Alcoa Date, First Survey 28-8-1916 Last Survey 28-8-1916
Reg. Book. on the S.S. "Countess of Mar" (Number of Visits one)

Master Built at Alcoa By whom built Forth S.S. & C. Co. Tons Gross Net When built 1916

Engines made at Newcastle By whom made H.E. Mar Eng Co. when made 1916

Boilers made at ditto By whom made ditto when made 1916

Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

ENGINES, &c.—Description of Engines

Dia. of Cylinders		Length of Stroke	Revs. per minute	Dia. of Screw shaft	No. of Cylinders	No. of Cranks
as per rule				as per rule		
as fitted				as fitted		
Is the screw shaft fitted with a continuous liner the whole length of the stern tube				Is the after end of the liner made water tight in the propeller boss		
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				Length of stern bush		
Dia. of Tunnel shaft	Dia. of Crank shaft journals	Dia. of Crank pin	Size of Crank webs	Dia. of thrust shaft under collars		
as per rule	as per rule					
as fitted	as fitted					
Dia. of screw	Pitch of Screw	No. of Blades	State whether moveable	Total surface		
No. of Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work			
No. of Bilge pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work			
No. of Donkey Engines	Sizes of Pumps	No. and size of Suctions connected to both Bilge and Donkey pumps				
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 the sluices on Engine room bulkheads 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

Dates of examination of completion of fitting of Sea Connections 28/5/16 of Stern Tube Screw shaft and Propeller

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	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	Thickness of plates	Description of longitudinal joint			No. of strengthening rings	
	top	bottom	top	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	
Material of stays	Diameter at smallest part	Area supported by each stay	Working pressure by rules	End plates in steam space:		
Material	Thickness	Pitch of stays	How are stays secured	Working pressure by rules	Material of stays	
Diameter at smallest part	Area supported by each stay	Working pressure by rules	Material of Front plates at bottom			
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	Superheater or Steam chest; how connected to boiler		Can the superheater be shut off and the boiler worked separately			
Diameter	Length	Thickness of shell plates	Material	Description of longitudinal joint		
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				

W941-0155

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods Connecting rods Crank shaft 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 of Crank shaft Identification Mark on Do. 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 duplicate of a previous case. If so, state name of vessel.

General Remarks (State quality of workmanship, opinions as to class, &c.)

Examined engine & boiler seatings, also sea connections. Stern Post - bored out; but tube not fitted. Vessel is to be towed to the Tyne, at which port the Stern Tube & Propeller Shaft will be fitted & the Engines & boiler fitted on board by Messrs North Eastern Marine Eng Co Ltd

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ : : When applied for, Special ... £ : : 19... Donkey Boiler Fee ... £ : : When received, after letter for 1/11/16 2-10-1916 1/16 Travelling Expenses (if any) £ : : 124

W. Gordon Murchie Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRI. 27. OCT. 1916

Assigned



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