

# REPORT ON MACHINERY.

No. 18957

State of writing Report 28/12/15 when handed in at Local Office 28/12/15 Port of Greenock THU. 30 DEC. 1915  
No. in Survey held at Port Glasgow Date, First Survey Jan 18 1915 Last Survey 2 Feb 1915  
Reg. Book. on the S.S. "CUMBERLAND" (Number of Visits 2)  
Master Wm Hamilton & Co Ltd Tons { Gross  
Engines made at Glasgow By whom built Wm Hamilton & Co Ltd When built 1915  
Boilers made at Glasgow By whom made S Rowan & Co when made 1915  
Registered Horse Power Federal Steam Co when made  
Gross Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes Port belonging to  
Is Electric Light fitted

**GINES, &c.—Description of Engines**

No. of Cylinders	No. of Cranks	Length of Stroke	Revs. per minute	Dia. of Screw shaft	Material of screw shaft
the screw shaft fitted with a continuous liner the whole length of the stern tube					
the propeller boss					
between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive					
If the liner is in more than one length are the joints burned					
If the liner does not fit tightly at the part					
If two					
If the shaft is lapped or protected between the liners					
Length of stern bush					
Dia. of Crank shaft journals					
Dia. of Crank pin					
Size of Crank webs					
Dia. of thrust shaft under					
Pitch of Screw					
No. of Blades					
State whether moveable					
Total surface					
Diameter of ditto					
Stroke					
Can one be overhauled while the other is at work					
Diameter of ditto					
Stroke					
Can one be overhauled while the other is at work					
SIZES OF PUMPS					
No. and size of Suctions connected to both Bilge and Donkey pumps					
In Holds, &c.					
Connected to condenser, or to circulating pump					
Is a separate Donkey Suction fitted in Engine room & size.					
Are the roses in Engine room always accessible					
Are the sluices on Engine room bulkheads always accessible					
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 the Blow Off Cocks fitted with a spigot and brass covering plate					
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					
of Stern Tube					
Screw shaft and Propeller					
the Screw Shaft Tunnel watertight					
Is it fitted with a watertight door					
worked from					

**ILERS, &c.—(Letter for record)** Manufacturers of Steel

**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
each boiler be worked separately					
Area of fire grate in each boiler					
No. and Description of Safety Valves to					
Area of each valve					
Pressure to which they are adjusted					
Are they fitted with easing gear					
Least distance between boilers or uptakes and bunkers or woodwork					
Mean dia. of boilers					
Length					
Material of shell plates					
Range of tensile strength					
Are the shell plates welded or flanged					
Descrip. of riveting: cir. seams					
Diameter of rivet holes in long. seams					
Pitch of rivets					
Lap of plates or width of butt straps					
Percentages of strength of longitudinal joint					
Working pressure of shell by rules					
Size of manhole in shell					
of compensating ring					
No. and Description of Furnaces in each boiler					
Material					
Outside diameter					
Thickness of plates					
Description of longitudinal joint					
No. of strengthening rings					
Working pressure of furnace by the rules					
Combustion chamber plates: Material					
Thickness: Sides					
Back					
Top					
Bottom					
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					
Pitch of tubes					
Material of tube plates					
Thickness: Front					
Back					
Mean pitch of stays					
Working pressures by rules					
Girders to Chamber tops: Material					
Depth and					
Length as per rule					
Distance apart					
Number and pitch of stays in each					
Superheater or Steam chest; how connected to boiler					
Can the superheater be shut off and the boiler worked					
Diameter					
Length					
Thickness of shell plates					
Material					
Description of longitudinal joint					
Diam. of rivet					
Pitch of rivets					
Working pressure of shell by rules					
Diameter of flue					
Material of flue plates					
Thickness					
Distance between rings					
Working pressure by rules					
End plates: Thickness					
How stayed					
Area of safety valves to superheater					
Are they fitted with easing gear					



*If so, is a report now forwarded?*

*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 “ “

<i>Dates of Examination of principal parts—</i>					
<i>Cylinders</i>	<i>Slides</i>	<i>Covers</i>	<i>Pistons</i>	<i>Rods</i>	
<i>Connecting rods</i>	<i>Crank shaft</i>	<i>Thrust shaft</i>	<i>Tunnel shafts</i>	<i>Screw shaft</i>	<i>Propeller</i>

Stern tube ..... Steam pipes tested ..... Engine and boiler seatings 2 2 15 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.
-------------------------	----------------------------	--------------------------	----------------------------

<i>Material of Tunnel shafts</i>	<i>Identification Marks on Do.</i>	<i>Material of Screw shafts</i>	<i>Identification Marks on Do.</i>
----------------------------------	------------------------------------	---------------------------------	------------------------------------

[illegible]

*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.)

**General Remarks** (State quality of workmanship, opinions as to class, &c. Propellers & fastenings of sea connections examined before launching & found in order.

The amount of Entry Fee	...	£	:	:	} When applied for,
Special	...	£	:	:	
Donkey Boiler Fee	...	£	:	:	} When received,
Travelling Expenses (if any)	£	:	:	:	

*Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.*

Committee's Minute GLASGOW 29 DEC. 1915

Assigned See minute on Gls Rpt. No. 35675

© 2019 Working Paper

Lloyd's Register  
Foundation