

REPORT ON MACHINERY.

No. 48829

Port of Newcastle

RECEIVED 18 MAY 1905

Received at London Office

No. in Survey held at Newcastle
Reg. Book.

Date, first Survey July 13th

Last Survey May 5 1905

(Number of Visits 38)

on the S/S Ancroft

Master C.W. Steel

Built at Newcastle By whom built Swan Hunter Wg. & Riel When built 1905

Tons Gross 3291
Net 2106

Engines made at Newcastle By whom made N. E. M. Eng. Co. Ltd when made 1905

Boilers made at " By whom made " when made 1905

Registered Horse Power _____ Owners Adam Bros. Ltd Port belonging to Newcastle

Nom. Horse Power as per Section 28 308 Is Refrigerating Machinery fitted no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Tri C.p.d

No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 23" 38" 64" Length of Stroke 45" Revs. per minute 65 Dia. of Screw shaft as per rule 13.19" Material of screw shaft Iron
as fitted 14.4"

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 ✓ Length of stern bush 4' 11"

Dia. of Tunnel shaft as per rule 11.8" Dia. of Crank shaft journals as per rule 12.34" Dia. of Crank pin 12 3/4" Size of Crank webs 24 1/2 x 8 1/4" Dia. of thrust shaft under collars 12 3/4" Dia. of screw 16' 3" Pitch of screw 16' 3" No. of blades 4 State whether moveable f Total surface 83 f

No. of Feed pumps 2 Diameter of ditto 3 1/4" Stroke 2 ft. Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 2 ft. Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 8" x 10" x 10" 7" 6" x 4" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4 of 3 1/2 In Holds, &c. 2 of 3 1/2 to each compartment

tunnel well 2 1/2

No. of bilge injections 1 sizes 4" Connected to condenser, or to circulating pump C.R. Is a separate donkey suction fitted in Engine room & size yes

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 ✓

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

When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____ 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) Total Heating Surface of Boilers 4770 f Is forced draft fitted no

No. and Description of Boilers 2 Cyld. Marine Type Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

Date of test 7-2-05 Can each boiler be worked separately yes Area of fire grate in each boiler 65 f No. and Description of safety valves to each boiler 2 Spring Area of each valve 8.29 Pressure to which they are adjusted 185 lb Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 2 feet Mean dia. of boilers 15' 6 3/16" Length 10' 6" Material of shell plates S

Thickness 1 3/32" Range of tensile strength 29-32 Are they welded or flanged ends _____ Descrip. of riveting: cir. seams d. r. lap long. seams d. butt. Straps

Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8" Lap of plates or width of butt straps 20 1/4"

Per centages of strength of longitudinal joint rivets 85.6 Working pressure of shell by rules 212 lb Size of manhole in shell 16 x 12"

Size of compensating ring flanged No. and Description of Furnaces in each boiler 3 Deighton Material S Outside diameter 49"

Length of plain part top _____ bottom _____ Thickness of plates crown 19" Description of longitudinal joint welded No. of strengthening rings _____

Working pressure of furnace by the rules 192 Combustion chamber plates: Material S Thickness: Sides 19/32 Back 19/32 Top 19/32 Bottom 1 1/16"

Pitch of stays to ditto: Sides 8" x 8" Back 8" x 8" Top 8" x 7" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 190 lb

Material of stays S Diameter at smallest part 1' 48" Area supported by each stay 64" Working pressure by rules 188 End plates in steam space: _____

Material S Thickness 1 Pitch of stays 16 x 15 3/4" How are stays secured d nuts Working pressure by rules 185 Material of stays S

Diameter at smallest part 2.5 Area supported by each stay 252 Working pressure by rules 200 Material of Front plates at bottom S

Thickness 1" Material of Lower back plate S Thickness 15/16" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 195

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2 x 4 3/8" Material of tube plates S Thickness: Front 1" Back 7/8" Mean pitch of stays 8.78"

Pitch across wide water spaces 14 1/2" Working pressures by rules 210 Girders to Chamber tops: Material S Depth and _____

thickness of girder at centre 8 1/4 x 1 1/2" Length as per rule 29" Distance apart 8" Number and pitch of Stays in each 2 of 4"

Working pressure by rules 195 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 _____ 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 _____

Is a Report also sent on the Hull of the Ship? If not, state whether, and when, one will be sent?



