

REPORT ON MACHINERY.

No. 233a

Port of Ketchikan

Received at London Office

19

No. in Survey held at Ketchikan - HarborDate, first Survey 14th June 1904 Last Survey 13th April 1905(Number of Visits 16)

Reg. Book.

Suppl. on the Steel Screw Steamer, "Elvina Skipper"Master P. Penmiller Built at KetchikanBy whom built Ketchikan - OdenwerkeGross 2086Tons Net 1324Engines made at KetchikanBy whom made Ketchikan - OdenwerkeWhen built 1905Boilers made at "By whom made do dowhen made 1905Registered Horse Power 158 NHPOwners Robert SkipperPort belonging to KetchikanNom. Horse Power as per Section 28 158 NHPIs Refrigerating Machinery fitted for cargo purposes noIs Electric Light fitted yes

ENGINES, &c.—Description of Engines

Dia. of Cylinders _____ Length of Stroke _____ Revs. per minute _____ No. of Cylinders _____ No. of Cranks _____

Is the screw shaft fitted with a continuous liner the whole length of the stern tube _____ Dia. of Screw shaft as per rule _____ Material of screw shaft _____

Is the after end of the liner made water tight _____ 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 as per rule _____ Dia. of Crank shaft journals as per rule _____ Dia. of Crank pin _____ Size of Crank webs _____ Dia. of thrust shaft under collars _____

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 _____

When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____ Is the screw shaft tunnel watertight _____

Is it fitted with a watertight door _____ worked from _____

Donkey BOILERS, &c.—

(Letter for record 8)Total Heating Surface of Boilers 539 1/2 sq. ft. Is forced draft fitted noNo. and Description of Boilers one cylindrical boiler with 2 furnaces Working Pressure 92 1/2 lbs. Tested by hydraulic pressure to 165 lbs.Date of test 24/12/04 Can each boiler be worked separately _____ Area of fire grate in each boiler 21 sq. ft. No. and Description of safety valves to each boiler 2 spring safety valves Area of each valve 5 sq. in. Pressure to which they are adjusted 92 1/2 lbs. Are they fitted with easing gear yesSmallest distance between boilers or uptakes and bunkers or woodwork 11 3/16" Mean dia. of boilers 2' 7" Length 8' Material of shell plates steelThickness 1/32" Range of tensile strength 27-31 tons Are they welded or flanged flanged Descrip. of riveting: cir. seams double long. seams 3 rowsDiameter of rivet holes in long. seams 29/32" Pitch of rivets 3" Lap of plates or width of butt straps 5 29/32"Per centages of strength of longitudinal joint _____ rivets 100% Working pressure of shell by rules 93 lbs. Size of manhole in shell 15 3/4" x 11 3/4"Size of compensating ring 5 7/8" x 1" No. and Description of Furnaces in each boiler 2 plain furnaces Material steel Outside diameter 2' 4 1/2"Length of plain part _____ top 5 1/2" bottom 8 7/8" Thickness of plates _____ crown 1/32" bottom 1/32" Description of longitudinal joint welded No. of strengthening rings noneWorking pressure of furnace by the rules 138 lbs. Combustion chamber plates: Material steel Thickness: Sides 15/32" Back 15/32" Top 9/16" Bottom 15/32"Pitch of stays to ditto: Sides 7 7/8" Back 7 1/32" Top 6 1/16" If stays are fitted with nuts or riveted heads with nuts Working pressure by rules 127 lbs.Material of stays steel Diameter at smallest part 1 1/32" Area supported by each stay 53 sq. in. Working pressure by rules 6000 lbs. End plates in steam space: _____Material steel Thickness 19/32" Pitch of stays 13 3/4" How are stays secured by nuts Working pressure by rules 118 lbs. Material of stays steelDiameter at smallest part 1 1/32" Area supported by each stay 190 sq. in. Working pressure by rules 2000 lbs. Material of Front plates at bottom steelThickness 1/32" Material of Lower back plate steel Thickness 1/32" Greatest pitch of stays 7 1/32" Working pressure of plate by rules 217 lbs.Diameter of tubes 3" Pitch of tubes 3 1/16" Material of tube plates steel Thickness: Front 29/32" Back 7/8" Mean pitch of stays 7 7/8"Pitch across wide water spaces _____ Working pressures by rules 86 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 1/16" Length as per rule 19 1/16" Distance apart 13" Number and pitch of Stays in each 2, 6 1/16"Working pressure by rules 118 lbs. 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 _____

DONKEY BOILER— No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____
 Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____
 No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____
 Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____ Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____
 Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____
 Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied :—

Stettiner Oderwerke

The foregoing is a correct description,

für Schiff- und Maschinenbau

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 14/6 20/11 24/12.04 5/1 26/1.05
 { During erection on board vessel - - } 13/2 4/4 13/4.05
 Total No. of visits 8

Is the approved plan of main boiler forwarded herewith _____

" " " donkey " " " yes

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

See please Report No 233.

The amount of Entry Fee. . £ : : When applied for, _____
 Special £ see report : : 1905
 Donkey Boiler Fee . . . £ No 233 : : When received, _____
 Travelling Expenses (if any) £ : : 1905

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

Committee's Minute

TUES. 16 MAY 1905

Assigned

see minute on Sta. Rpt 233



© 2021

Lloyd's Register Foundation