

REPORT ON BOILERS.

No. 50266.

22 SEP 1939

Received at London Office

23 SEP 1939

Date of writing Report

19

When handed in at Local Office

19

Port of

HULL

No. in Survey held at
Reg. Book.

Date, First Survey 21-3-39 Last Survey 21-9-1939

On the SINGLE SREW STEAM TRAWLER "CAPE PASSARO"

(Number of Visits)

Gross 591.19
Net 224.67

Master Built at By whom built When built 1939

Engines made at By whom made Engine No. 1049 When made 1939

Boilers made at By whom made Boiler No. 1049 When made 1939

Nominal Horse Power 162.8 Owners Managers: Hudson Bros. (Tramway Co.)

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel The Steel Company of Scotland, Ltd. (Letter for Record 5)

Total Heating Surface of Boilers 2351 Is forced draught fitted Yes Coal or Oil fired Oil.

No. and Description of Boilers One S.B. Working Pressure 225 lbs.

Tested by hydraulic pressure to 390 lbs Date of test 16.5.39 No. of Certificate 4011 Can each boiler be worked separately

Area of Firegrate in each Boiler 64.7 No. and Description of safety valves to each boiler One safety valve spring loaded.

Area of each set of valves per boiler {per Rule 16.15 as fitted 14.295 Pressure to which they are adjusted 225 lbs. Are they fitted with easing gear Yes.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Is oil fuel carried in the double bottom under boilers No.

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated No.

Largest internal dia. of boilers 15'-9 1/2" Length 11'-0" Shell plates: Material Steel Tensile strength 31.55 tons.

Thickness 1 5/32" Are the shell plates welded or flanged No. Description of riveting: circ. seams {end Double riveted inter. 37/8" 1 5/32" Pitch of rivets {plate 29/32" rivets 29/32"

long. seams Triple riveted Diameter of rivet holes in {circ. seams 1 5/32" long. seams 1 1/2" Pitch of rivets {plate 29/32" rivets 29/32"

Percentage of strength of circ. end seams {plate 62.1 rivets 44.2 Percentage of strength of circ. intermediate seam {plate 84.31 rivets 86.90

Percentage of strength of longitudinal joint {plate 84.31 rivets 86.90 combined 85.19 Working pressure of shell by Rules 226.3 lbs.

Thickness of butt straps {outer 1 5/32" inner 1 9/32" No. and Description of Furnaces in each Boiler 3 C.F. Single Type.

Material Steel Tensile strength 26-30 tons Smallest outside diameter 3'-10"

Length of plain part {top 23 3/32" bottom 23 3/32" Thickness of plates {crown 23 3/32" bottom 23 3/32" Description of longitudinal joint Triple welded.

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 229.5 lbs.

End plates in steam space: Material Steel Tensile strength 26-30 tons Thickness 1 1/4" Pitch of stays 9 1/4" x 18 3/4"

How are stays secured Nut back of front plate and nut under Working pressure by Rules 236.4 lbs.

Tube plates: Material Steel Tensile strength {front 26-30 tons back 26-30 tons Thickness {front 31/32" back 29/32"

Mean pitch of stay tubes in nests 10.94" Pitch across wide water spaces 14 1/4" Working pressure {front 236 lbs. back 249 lbs.

Girders to combustion chamber tops: Material Steel Tensile strength 29.33 tons Depth and thickness of girder

at centre 9 x 7 1/8 x 2 Length as per Rule 32 1/4" Distance apart 9 1/4" No. and pitch of stays

in each 3 @ 7 1/2" Working pressure by Rules 236.2 lbs. Combustion chamber plates: Material Steel

Tensile strength 26-30 tons Thickness: Sides 29/32" Back 29/32" Top 1 1/4" Bottom 1 1/4"

Pitch of stays to ditto: Sides 9 1/4" x 8" Back 9 1/4" x 9 1/4" Top 9 1/4" x 7 1/2" Are stays fitted with nuts or riveted over Nut.

Working pressure by Rules 235 lbs Front plate at bottom: Material Steel Tensile strength 26-30 tons

Thickness 31/32" Lower back plate: Material Steel Tensile strength 26-30 tons Thickness 29/32"

Pitch of stays at wide water space 14 1/4" Are stays fitted with nuts or riveted over Nut.

Working Pressure 225 lbs Main stays: Material Steel Tensile strength 28-32 tons

Diameter {At body of stay, 3 3/4" (1.151) No. of threads per inch 8 Area supported by each stay 368 sq. in.

Working pressure by Rules 257.7 lbs Screw stays: Material Steel Tensile strength 26-30 tons

Diameter {At turned off part, 1 3/4" 1 7/8" 2" 2 1/8" No. of threads per inch 10 Area supported by each stay 77 sq. in.

Working pressure by Rules 225.74 lbs the stays drilled at the outer ends 40. Margin stays: Diameter { At turned off part, 1 7/8 " 2" 2 1/8" or Over threads }
 No. of threads per inch 10 Area supported by each stay 118 EI Working pressure by Rules 225 EI.
 Tubes: Material L.W. Riv. External diameter { Plain 3 1/2 " Stay 3 1/2 " } Thickness { 5/16 " 3/8 " 7/16 " } No. of threads per inch 9.
 Pitch of tubes 4 3/4 x 4 3/4 " Working pressure by Rules 260 lbs. 225 EI. Manhole compensation: Size of opening in shell plate 16 x 12 " Section of compensating ring 4-11 1/4 x 1 1/2 " No. of rivets and diameter of rivet holes 115 @ 1 1/2 " Outer row rivet pitch at ends 10.75 " Depth of flange if manhole flanged 1 " Steam Dome: Material Steel.
 Tensile strength 26.80 tons. Thickness of shell 3/4 " Description of longitudinal joint S.R. Lap.
 Diameter of rivet holes 1 1/8 " Pitch of rivets 2 1/4 " Percentage of strength of joint { Plate 54.7 Rivets 45.87 }
 Internal diameter 2.9 " Working pressure by Rules 225 lbs. Thickness of crown 5/16 " No. and diameter of stays 2 @ 2 3/8 " Inner radius of crown flat. Working pressure by Rules 225 lbs.
 How connected to shell Direct inside. Size of doubling plate under dome 4-11 1/4 x 1 1/2 " Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 36 Rivets @ 1 1/2" diam 5-9 3/4" P.C.
 Type of Superheater Single Tube. Manufacturers of { Tubes The Loughborough Co. Ltd. Manchester Steel forgings " Steel castings Black & Carter Ltd. Gillingham }
 Number of elements 60. Material of tubes Steel. Internal diameter and thickness of tubes 17mm. 3mm thick
 Material of headers Steel. Tensile strength 1 Thickness 5/8 " Can the superheater be shut off and the boiler be worked separately Yes Is a safety valve fitted to every part of the superheater which can be shut off from the boiler Yes.
 Area of each safety valve 1.77 EI. Are the safety valves fitted with easing gear Yes. Working pressure as per Rules 19.59 EI. Pressure to which the safety valves are adjusted 225 lbs. Hydraulic test pressure: tubes 170 lbs. forgings and castings 675 lbs. and after assembly in place 675 lbs. Are drain cocks or valves fitted to free the superheater from water where necessary Yes.
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes.

The foregoing is a correct description,
 FOR CHARLES D. HOLMES & CO., LTD. Manufacturer.
S. C. Cooper

Dates of Survey { During progress of work in shops - - } See machinery repts attached Are the approved plans of boiler and superheater forwarded herewith Yes (If not state date of approval.)
 while building { During erection on board vessel - - } Total No. of visits 1

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. S.S. CAPE SIRETIKO
Home Rep. No. 50161.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This Boiler has been constructed under Special License & the Materials & workmanship are good & sound. The Boiler has been satisfactorily installed & has been examined under working conditions & found to be in good order.

Survey Fee £ : : } When applied for, 19.
 Travelling Expenses (if any) £ : : } When received, 19.

R. H. S. P. S. S.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 29 SEP 1930
 Assigned See Incl 7E 50266