

RETAIN

## REPORT ON BOILERS.

No. 50360

24 NOV 1939

Received at London Office

Date of Survey Report

10

When handed in at Local Office

10

Port of

HULL

No. in Reg. Book.

Survey held at

Date, First Survey

28. 3. 39.

Last Survey

8. 11. 1939.

(Number of Visits)

29

Gross 591.

Net 225.

15937 on the SINGLE SKEW STEAM TRAWLER "CAPE FINISTERRE"

Master Built at Hull By whom built William &amp; Sons Ltd. Yard No. 1205 When built 1939

Engines made at Hull By whom made Messrs. D. Adams &amp; Co. Ltd. Engine No. 1550 When made 1939

Boilers made at Hull By whom made Messrs. D. Adams &amp; Co. Ltd. Boiler No. 1550 When made 1939

Nominal Horse Power 162.8 Owners Messrs. Messrs. Filling Ltd. Port belonging to Hull

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel The Steel Company of Wales, Ltd. (Letter for Record "S.")

Total Heating Surface of Boilers 2551 sq. ft. 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 2.6.39 No. of Certificate 4012 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 64 sq. ft. No. and Description of safety valves to each boiler Two twin valve Spring loaded.

Area of each set of valves per boiler {per Rule 16.1 E / as fitted 19.29 E} 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 Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Is oil fuel carried in the double bottom under boilers Yes

Smallest distance between shell of boiler and tank top plating 12" 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 21-25 tons

Thickness 1 1/2" Are the shell plates welded or flanged No. Description of riveting: circ. seams {end Double riveted / inter. 3 7/8"}

long. seams Triple riveted Diameter of rivet holes in {circ. seams 1 1/2" / long. seams 1 1/2" Pitch of rivets {plate 9 9/16" / rivets 9 9/16"}

Percentage of strength of circ. end seams {rivets 44.2 / plate 84.31} Percentage of strength of circ. intermediate seam {plate 86.90 / rivets 85.89}

Percentage of strength of longitudinal joint {plate 86.90 / rivets 85.89 / combined 85.89} 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 Tube Type.

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

Length of plain part {top 1' / bottom 1'} Thickness of plates {crown 2 3/32" / bottom 2 3/32"} Description of longitudinal joint Lap welded.

Dimensions of stiffening rings on furnace or c.c. bottom Yes 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 19 1/4" x 18 1/2"

How are stays secured Nut &amp; lock washer Working pressure by Rules 236.4 lbs.

Tube plates: Material {front Steel / back Steel} Tensile strength {26-30 tons / 26-30 tons} Thickness {31/32" / 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 1/2 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 23/32" Back 23/32" Top 1 1/8" Bottom 1 5/8"

Pitch of stays to ditto: Sides 7 3/4 x 8 Back 8 3/4 x 9 3/4 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 9/32" Lower back plate: Material Steel Tensile strength 26-30 tons Thickness 29/32"

Pitch of stays at wide water space 14 1/2" 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, or Over threads 3 3/8" (P.I.E.)} No. of threads per inch 8 Area supported by each stay 368 sq. in.

Working pressure by Rules 237.7 lbs. Screw stays: Material Steel Tensile strength 26-30 tons

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

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Working pressure by Rules 235 lbs. Are the stays drilled at the outer ends No. Margin stays: Diameter 1 1/2" At turned off part, 1 1/2" Over threads 1 1/2"

No. of threads per inch 10. Area supported by each stay 138 sq. in. Working pressure by Rules 229 lbs.

Tubes: Material L.W. Riv. External diameter 3 1/2" Thickness 5/16" No. of threads per inch 9

Pitch of tubes 4 3/4" x 4 3/4" Working pressure by Rules 260 lbs. Manhole compensation: Size of opening in shell plate 16 x 12" Section of compensating ring 4 1/4" x 1 1/2" No. of rivets and diameter of rivet holes 108

Outer row rivet pitch at ends 10.75" Depth of flange if manhole flanged ✓ Steam Dome: Material Steel

Tensile strength 26.20 Tens. Thickness of shell 3/4" Description of longitudinal joint S.R. LAP.

Diameter of rivet holes 1 1/2" Pitch of rivets 2 1/4" Percentage of strength of joint 54%

Internal diameter 2.9" Working pressure by Rules 235 lbs. Thickness of crown 5/16" No. and diameter of stays 2 @ 2 3/8" Inner radius of crown 4.6" Working pressure by Rules 225 lbs.

How connected to shell Double ended Size of doubling plate under dome 4 1/4" x 1 1/2" Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 36 @ 1 1/2"

Type of Superheater Single Tube Manufacturers of Th. Lapham & Co. Ld. Manchester

Number of elements 60. Material of tubes Steel Internal diameter and thickness of tubes 1 7/8" 3/16"

Material of headers Steel Tensile strength ✓ 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 sq. in. Are the safety valves fitted with easing gear Yes Working pressure as per Rules 235 lbs. Hydraulic test pressure: 225 lbs.

tubes 1070 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.  
W.R. Evans Manufacturer.

Dates of Survey During progress of work in shops - 1939. MAR. 28, APR. 17, MAY, 22, 12, 22, 23. Are the approved plans of boiler and superheater forwarded herewith Yes  
while building During erection on board vessel - JUN. 12, 13, 20, 27, JUL. 3, 4, 10, 20, 25, AUG. 2, 15, SEPT. 5, 11, 25, 27, 29, OCT. 6, 19, 17, Total No. of visits 29.  
(If not state date of approval.)

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. S/S. "CAPE SIRETOKO"

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) S/S. "CAPE PASSARO"

THE REPORTS N° 50161 & 50266.

This Boiler has been constructed under Special License & The material & workmanship are found to be good.  
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

W.R. Evans  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 1 DEC 1939

Assigned See 1st machy rpt.