

REPORT ON BOILERS.

No. 11761.

Received at London Office 25 AUG 1945

Date of writing Report 4th Aug. 1945 When handed in at Local Office

Port of Copenhagen

No. in Survey held at Copenhagen & Odense
eg. Book.Date, First Survey 20th August 1942 Last Survey 22nd July 1945

on the Steel Single Screw Motor Vessel SALLY MERSH.

(Number of Visits 24.) Gross 5170.22
Tons Net 3056.01

Master ☒ Built at Odense By whom built Skalskibsværft² Yard No. 92 When built -
Engines made at Copenhagen By whom made A/S Burmeister & Wain's Markin - y Skibsbegygeri Engine No. 3389 When made 1942
Boilers made at Copenhagen By whom made A/S Jørn & Hylkegaard & Hylkegaard Boiler No. 804 When made 1943
Nominal Horse Power Owners A/S Dampskibsselskabet - Svendborg - Port belonging to Copenhagen

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

PLATES: Vilkovice Hives Steel. Ironworks & Fordingham Steel Co. Ltd.

Manufacturers of Steel TUBES: Sandvikens Jernværk² A/S, Sweden RIVETS: Hinge Bros, Cpn. (Letter for Record S. 100/16)Total Heating Surface of Boilers 63.84² Is forced draught fitted no Coal or Oil fired exhaust gasNo. and Description of Boilers One off vertical multitubular Working Pressure 7 kg/cm²Tested by hydraulic pressure to 14 kg/cm² Date of test 10.6.1943 No. of Certificate 684 Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 2 off directly spring loaded.

Area of each set of valves per boiler {per Rule 2280 1/2² as fitted 3900 1/2² Pressure to which they are adjusted 7 kg/cm² Are they fitted with easing gear yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No main boiler fitted.

Smallest distance between boilers or uptakes and bunkers or woodwork 2000 1/4 Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating at top of the engine Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 2000 1/4 Length 2182 1/4 Shell plates: Material Siemens M. Steel Tensile strength 44-50 kg/cm²

Thickness 11 1/4 Are the shell plates welded or flanged No Description of riveting: circ. seams lap joint

Long. seams double riveting Diameter of rivet holes in {circ. seams 20.5 1/4 Pitch of rivets 45 1/4

Percentage of strength of circ. end seams {plate 54.52 rivets 54.5% Percentage of strength of circ. intermediate seam {plate 77% rivets 130%

Percentage of strength of longitudinal joint {plate 77% rivets 130% combined 82% Working pressure of shell by Rules 118 lbs/sq in

Thickness of butt straps {outer 11 1/4 inner 11 1/4 No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part {top Thickness of plates {crown Description of longitudinal joint

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

End plates in steam space: Material Tensile strength Thickness Pitch of stays

How are stays secured Working pressure by Rules

End plates: Material TOP Siemens Martin Steel Tensile strength 41-47 kg/cm² Thickness 19 1/4Can pitch of stay tubes in nests 278 1/4 Pitch across wide water spaces D = 405 1/4 Working pressure 10.35 kg/cm²

Orders to combustion chamber tops: Material Tensile strength Depth and thickness of girder

centre Length as per Rule Distance apart No. and pitch of stays

each Working pressure by Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

Working pressure by Rules Front plate at bottom: Material Tensile strength

Thickness Lower back plate: Material Tensile strength Thickness

Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

Gasket {At body of stay, No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

Gasket {At turned off part, No. of threads per inch Area supported by each stay

Gasket {Over threads

Gasket {Over threads

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Working pressure by Rules ☒ Are the stays drilled at the outer ends ☒ Margin stays: Diameter ☒ At turned off part, ☒ Over threads ☒

No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by Rules ☒

Tubes: Material *Stainless Steel* External diameter ☒ Plain *89 1/4* ☒ Thickness ☒ *3.25 1/4* ☒ No. of threads per inch ☒ *11*

Pitch of tubes *120 1/4* Working pressure by Rules *8.5 kg/cm²* Manhole compensation: Size of opening in shell plate *320 1/4 x 420 1/4* Section of compensating ring *flat* No. of rivets and diameter of rivet holes *40 1/4, 20.5 1/4*

Outer row rivet pitch at ends *90 1/4* Depth of flange if manhole flanged ☒ Steam Dome: Material ☒

Tensile strength ☒ Thickness of shell ☒ Description of longitudinal joint ☒

Diameter of rivet holes ☒ Pitch of rivets ☒ Percentage of strength of joint ☒ Plate ☒ Rivets ☒

Internal diameter ☒ Working pressure by Rules ☒ Thickness of crown ☒ No. and diameter of stays ☒ Inner radius of crown ☒ Working pressure by Rules ☒

How connected to shell ☒ Size of doubling plate under dome ☒ Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell ☒

Type of Superheater ☒ Manufacturers of ☒ Tubes ☒ Steel castings ☒

Number of elements ☒ Material of tubes ☒ Internal diameter and thickness of tubes ☒

Material of headers ☒ Tensile strength ☒ Thickness ☒ Can the superheater be shut off and the boiler be worked separately ☒ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler ☒

Area of each safety valve ☒ Are the safety valves fitted with easing gear ☒ Working pressure as per Rules ☒ Pressure to which the safety valves are adjusted ☒ Hydraulic test pressure: tubes ☒ castings ☒ and after assembly in place ☒ Are drain cocks or valves fitted to free the superheater from water where necessary ☒

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *yes*

The foregoing is a correct description,
SMITH, MYGIND & HÜTTEMEIER
W. H. H. H. H. Manufacturer.

Dates of Survey ☒ During progress of work in shops -- *1942: 20/8, 4/9, 21/9, 13/10, 1943: 28/29, 7/5, 10/6* Are the approved plans of boiler and superheater forwarded herewith *yes*
☒ while building ☒ During erection on board vessel -- *1943: 28/5, 28/6, 4/8, 26/8, 22/10, 11/11, 30/11, 1944: 8/1, 2/2, 10/3, 1945: 7/7, 19/7, 20/7, 21/7, 22/7* Total No. of visits *24*
(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. *75 Live Mark of Copenhagen Ocean Yacht No 90 Gen April 11762*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey in accordance with the requirements of the Rules and the approved plan. The material has been tested as required by the Rules and the workmanship is good. The boiler has been installed on board under special survey to our satisfaction.*

Recommend the vessel to have notation 2 D.B 100 lb

Survey Fee ... *£4100.00* When applied for, *25/10* 19 *43*
Travelling Expenses (if any) £ : : When received, *27/10* 19 *43*

L. Clausen
Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute *FRI. 11 JAN 1946*
Assigned *see minute on D.B. Rpt.*