

REPORT ON WATER TUBE BOILERS.

No. 8037

Oil fired stand by Boiler

Date of writing Report 28 April 1941 When handed in at Local Office 5 May 1941 Received at London Office 9 JUL 1941

No. in Survey held at Philadelphia Pa Port of Philadelphia

Reg. Bk. M/S. ATLANTIC SUN. Date, First Survey 20 Dec 1940 Last Survey 19 March 1941

on the M/S. ATLANTIC SUN. (Number of Visits 8)

Master Philadelphia Pa Built at Philadelphia Pa By whom built Sim SB Co. Tons { Gross 11355 Net 6891

Engines made at Philadelphia Pa By whom made Sim SB & D D Co. When built 1940 41

Boilers made at Barnett NJ By whom made Fort Wheeler Corporation When made 1941

Registered Horse Power Sim Gil Co Owners Sim Gil Co Port belonging to Philadelphia

WATER TUBE BOILERS MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel Carnegie Steel Co

Letter for Record IFW. Main Conn Pk (W.T.) Date of Approval of plan 8 Aug 1940 Number and Description or Type 4400 drum

No. of Certificate 730 Can each boiler be worked separately Yes Working Pressure 245 lb Tested by Hydraulic Pressure to 368 lb Date of Test 18-2-41

Is forced draught fitted Yes Total Heating Surface of Boilers 12580

Main and Auxiliary 2 Spring loaded Crosby "high lift" type No. and type of burners (oil) in each boiler One Burn type

Each boiler 2 Spring loaded Crosby "high lift" type Area of each valve 1.77 sq ft Pressure to which they are adjusted 245 lb

Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler motor ship

Smallest distance between boilers or uptakes and bunkers or woodwork 11' 1" Height of Boiler 11' 1" Width and Length 11' 9" x 7' 0"

Steam Drums:—Number in each boiler 1 Inside diameter 36" Material of plates Steel Thickness 3/4"

Range of Tensile Strength 65000 lb minimum Are drum shell plates welded or flanged Union Welded Description of riveting:—

Cir. seams Union Welded long. seams Union Welded Diameter of rivet holes in long. seams 3/16" Pitch of Rivets 2"

Lap of plate or width of butt straps 4 1/2" Thickness of straps 3/16" Percentage strength of long. joint:—Plate 42.2 Rivet 42.2

Diameter of tube holes in drum 4 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.2

If Drum has a flat side state method of staying No flat side Depth and thickness of girders at centre 2 1/2" x 7"

by rules Steel Number and pitch of stays in each 23/32" x 19/32" Working pressure 245 lb

Size of Manhole or Handhole 12 x 16" Material Steel Thickness 5/8" Radius or how stayed Ellipsoidal

Material of plates Steel Thickness 5/8" Water Drums:—Number in each boiler 1 Inside Diameter 7 1/4" square

Are flanged solid drum Description of riveting:—Cir. seams Union Welded long. seams Union Welded Diameter of Rivet Holes in 3/16"

ong. seams Union Welded Pitch of rivets 2" Lap of plates or width of butt straps 4 1/2" Thickness of straps 3/16"

Percentage strength of long. joint:—Plate 42.2 Rivet 42.2 Diameter of tube holes in drum 2 1/32" Pitch of tube holes 7"

Percentage strength of drum shell in way of tubes 42.2 Water Drum Heads or Ends:—Material Steel Thickness 5/8"

Radius or how stayed Steel Size of manhole or handhole 12 x 16" Headers or Sections:—Number 18

Material Steel Thickness 5/8" Tested by Hydraulic Pressure to 368 lb Material of Stays 2" x 4"

Area at smallest part 134" x 165" Area supported by each stay 288 x 9 Working Pressure by Rules 245 lb Tubes:—Diameter 2" x 4"

Thickness 134" x 165" Number 288 x 9 Steam Dome or Collector:—Description of Joint to Shell None

Percentage strength of Joint 42.2 Diameter 2" x 4" Thickness of shell plates 3/16" Material Steel

Description of longitudinal joint Union Welded Diameter of Rivet Holes 3/16" Pitch of Rivets 2" Working Pressure of shell 245 lb

by Rules 42.2 Crown or End Plates:—Material Steel Thickness 5/8" How stayed Union Welded

SUPERHEATER. Type None Date of Approval of Plan 8 Aug 1940 Tested by Hydraulic Pressure to 368 lb

Date of Test 18 Feb 1941 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes

Diameter of Safety Valve 2" Pressure to which each is adjusted 245 lb Is easing gear fitted Yes

Is a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes 2" x 4" x 3/16"

Spare Gear. Tubes 2" x 4" x 3/16" Gaskets or joints:—Manhole Union Welded Handhole Union Welded Handhole plates Union Welded

The foregoing is a correct description,

Manufacturer.

Dates { During progress of 20 Dec 1. 10 & 17 Jan 1941 Is the approved plan of boiler forwarded herewith Yes

Survey { work in shops - - - } Total No. of visits 8

while { During erection on 23 Jan 11 Feb 18 Feb 19 March 1941

building { board vessel - - - }

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey and in accordance with the approved plans. The workmanship & materials are good. The boiler has been satisfactorily installed on board the vessel, and tested to 368 lb hydraulic pressure. 2 safety valves have been adjusted under steam to 245 lb. In my opinion the vessel is fitted to receive the record of 3 WTDB. (1 Spt) 245 lb.

Survey Fee ... £ { see other : } When applied for, 19

Travelling Expenses (if any) £ { Report for fees. } When received, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK MAY 28 1941Assigned / W.T.D.B. (oil fired) - 245 LBS.

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Foundation

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