

REPORT ON WATER TUBE BOILERS.

No. 6991

12 FEB 1959

Received at London Office

Writing Report 29.1.1959 When handed in at Local Office 19 Port of Helsingfors

Survey held at Helsingfors Date, First Survey 21.8.58 Last Survey 21.1.1959

Book for diesel electric icebreaker "MOSKVA" (Number of Visits 6) Gross Tons 37

at Helsingfors, Finland By whom built Wärtsilä-koncernen A/B Yard No. 365 When built 1959

es made at Helsingfors, Finland By whom made (Wärtsilä-koncernen A/B) Engine No. 2795 When made 1959

s made at Helsingfors, Finland By whom made (Maskin och Bro) Boiler No. 2795 When made 1959

r Register Book 1400 ft² Owners Maskin och Bro Port belonging to Phoenix = Rheinrohr A.F. etc.

WATER TUBE BOILERS MAIN AUXILIARY, OR DONKEY. Manufacturers of Steel Phoenix = Rheinrohr A.F. etc.

of Approval of plan 21.10.1957, Drawing No. 1M36104/A No. and Description or Type B&W Marine Water Tube Boiler Working Pressure 10 kg/cm² Tested by Hydraulic Pressure to 18.5 kg/cm² Date of Test 21.1.1959

of Certificate 10 Can each boiler be worked separately Yes Total Heating Surface of Boilers 130 m² Superheaters -

Economisers - Is forced draught fitted No Area of Fire Grate (coal) in each Boiler oil fired

and type of burners (oil) in each boiler one No. and description of safety valves on boiler one, 2 x 70 double spring loaded Area of each set of valves per boiler { per rule 70.28 cm² as fitted 77 cm² Pressure to which they are adjusted 10 kg/cm² Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter donkey boiler No main Blr Smallest distance between boilers or uptakes and bunkers or woodwork Height of boiler 914 mm

th and length Steam Drums: Number in each boiler one Inside diameter 914 mm

ickness of plates 18 mm Range of tensile strength 41-47 kg/mm² Are drum shell plates welded

anged welded If fusion welded, state name of welding firm Wärtsilä-koncernen A/B Maskin och Bro Have all the requirements of the Rules Class I vessels been complied with yes Description of riveting: Circ. seams long seams

meter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum 25.4/38.4 mm Pitch of tube holes 38.8/59 mm

centage strength of shell in way of tubes 34% Steam Drum Heads or Ends: Range of tensile strength 41-47 kg/mm² Water Drums: Number

ickness of plates 16 mm Radius or how stayed r = 95 mm Size of manhole or handhole 300 x 400 mm Are drum shell plates

ack boiler one Inside diameter 328 mm Thickness of plates 20 mm Range of tensile strength 41-47 kg/mm² Have all the requirements of the Rules

led or flanged seamless If fusion welded, state name of welding firm Description of riveting: Circ. seams long seams

Class I vessels been complied with yes Description of riveting: Circ. seams long seams

meter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum 25.4/38.4 mm Pitch of tube holes 38.8/59 mm

centage strength of drum shell in way of tubes 34% Water Drum Heads or Ends: Range of tensile strength 41-47 kg/mm²

ickness of plates 13 mm Radius or how stayed r = 65, R = 328 mm Size of manhole or handhole 105/121 mm

aders or Sections: Number Material Thickness Tested by hydraulic pressure to

bes: Diameter inside 19/31 mm Thickness 3/3.5 mm Number 576 and 95 Steam Dome or Collector: Description of

nt to shell Inside diameter Thickness of shell plates Range of tensile

ngth Description of longitudinal joint If fusion welded, state name of welding

Have all the requirements for the Rules for Class I vessels been complied with Diameter of rivet holes

ch of rivets Thickness of straps Percentage strength of long. joint plate rivet

own or End Plates: Range of tensile strength Thickness Radius or how stayed

SUPERHEATER, Drums or Headers: Number in each boiler No superheater Inside diameter 20.2.59

ickness Material Range of tensile strength Are drum shell plates welded

flanged If fusion welded, state name of welding firm Have all the requirements of the Rules

Class I vessels been complied with Description of riveting: Circ. seams long seams

iameter of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of long. joint: Plate Rivet Diameter of tube holes in drum Pitch of tube holes Percentage strength of drum shell in way of tubes Drum Heads or Ends: Thickness Range of tensile strength

adius or how stayed Size of manhole or handhole Number, diameter, and thickness of tubes

tested by hydraulic pressure to Date of test Is a safety valve fitted to each section of the superheater which can be shut off from the boiler No. and description of safety valves Area of each set of valves Pressure to which they are adjusted Is easing gear fitted

Spare Gear. Has the spare gear required by the Rules been supplied

The foregoing is a correct description, Wärtsilä-koncernen A/B, Maskin och Bro Manufacturer.

Dates During progress of work in shops 21.8.58-21.1.59 Is the approved plan of boiler forwarded herewith yes

while During erection on board vessel Total No. of visits

this boiler a duplicate of a previous case no If so, state vessel's name and report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. Material and workmanship found good. Boiler found fit for class subject to steam trial, being carried out with satisfactory result.

Survey Fee ... Fmk. £ 27.000 :- When applied for 19

Travelling Expenses (if any) £ :- When received 19

The fee will be applied for upon the return of the attached Certificate No. 10.

Date FRIDAY 14 OCT 1960

Committee's Minute See Rpt. 1

PLEASE RETURN THIS REPORT TO THE FIRST ENTRY

Engineer Surveyor to Lloyd's Register of Shipping. AKE. WEBER

Lloyd's Register Foundation

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