

REPORT ON WATER TUBE BOILERS.

No. 7375

13 JAN 1960

Received at London Office

Survey Report 9.1. 1960 When handed in at Local Office 19. Port of Helsingfors
 Survey held at Helsingfors Date, First Survey 12.8.59 Last Survey 18.12. 19 59
 (Number of Visits 6) Gross Tons
 the diesel electric Icebreaker "LENINGRAD"
 Helsingfors, Finland By whom built Wärtsilä-koncernen A/B Yard No. 366 When built 1959
 By whom made Maskin och Bro Engine No. When made
 Helsingfors, Finland By whom made Wärtsilä-koncernen A/B Boiler No. 2860 When made 1959
 Owners Port belonging to

TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Phoenix-Rheinrohr A.G. etc.

Approval of plan 12.12.1958, Drawing No. 1M51421
 B&W Marine Water Tube Boiler Working Pressure 10 kg/cm² Tested by Hydraulic Pressure to 18.5 kg/cm² No. and Description or Type
 Certificate 14 Can each boiler be worked separately yes Total Heating Surface of Boilers 130 m² Date of Test 18.12.1959
 Draught fitted No Area of Fire Grate (coal) in each Boiler oil fired
 No. and description of safety valves on

one, 2 x 70 double spring loaded Area of each set of valves per boiler per rule 71.65 cm²
 as fitted 77 cm² Pressure to which they

ed 10 kg/cm² Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter
 No main Blr Smallest distance between boilers or uptakes and bunkers or woodwork Height of boiler

l length Steam Drums:—Number in each boiler one Inside diameter 914 mm
 of plates 18 mm Range of tensile strength 41-47 kg/mm² Are drum shell plates welded
 welded If fusion welded, state name of welding firm Wärtsilä-koncernen A/B Maskin och Bro Have all the requirements of the Rules

I vessels been complied with yes Description of riveting:—Circ. seams long. seams
 of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of

t:—Plate Rivet Diameter of tube holes in drum 25.4/38.4 mm Pitch of tube holes 38.8/59 mm
 e strength of shell in way of tubes 34 % R = 950 mm Steam Drum Heads or Ends:—Range of tensile strength 41-47 kg/mm²
 of plates 16 mm Radius or how stayed r = 95 mm Size of manhole or handhole 300 x 400 mm Water Drums:—Number

oiler one Inside diameter 328 mm Thickness of plates 20 mm Range of tensile strength 41-47 kg/mm² Are drum shell plates
 flanged seamless If fusion welded, state name of welding firm Have all the requirements of the Rules

I vessels been complied with yes Description of riveting:—Circ. seams long. seams
 of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of

e 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
 e strength of drum shell in way of tubes Water Drum Heads or Ends:—Range of tensile strength 41-47 kg/mm²
 of plates 13 mm Radius or how stayed r = 65, R = 325 mm Size of manhole or handhole 105/121 mm

or Sections:—Number Material Thickness Tested by hydraulic pressure to
 Diameter inside 19/31 mm Thickness 3/3.5 mm Number 576 and 95 Steam Dome or Collector:—Description of

ell Inside diameter Thickness of shell plates Range of tensile
 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
 rivets Thickness of straps Percentage strength of long. joint plate rivet

End Plates:—Range of tensile strength Thickness Radius or how stayed
 HEATER, Drums or Headers:—Number in each boiler No superheater Inside diameter 23.2.60

Material Range of tensile strength Are drum shell plates welded
 If fusion welded, state name of welding firm Have all the requirements of the Rules

I vessels been complied with Description of riveting:—Circ. seams long. seams
 of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of

t:—Plate Rivet Diameter of tube holes in drum Pitch of tube holes Percentage strength of
 l in way of tubes Drum Heads or Ends:—Thickness Range of tensile strength

how stayed Size of manhole or handhole Number, diameter, and thickness of tubes
 hydraulic pressure to Date of test Is a safety valve fitted to each section of the superheater which

ut off from the boiler No. and description of safety valves Area of each set
 Pressure to which they are adjusted Is easing gear fitted

ear. Has the spare gear required by the Rules been supplied

The foregoing is a correct description,

Wärtsilä-koncernen A/B, Maskin och Bro Helsingfors Manufacturer.

During progress of work in shops 12.8.-18.12.59 Is the approved plan of boiler forwarded herewith no

During erection on board vessel Total No. of visits

Is a duplicate of a previous case yes If so, state vessel's name and report No. 6991 "MOSKVA"

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

Survey Fee ... Fmk. 27,000:— When applied for 19.
 Surveying Expenses (if any) £ : : When received 19.
 The fee will be applied for upon return of the attached certificate No. 14.

Date FRIDAY 16 FEB 1962
 S. H. 8382

Engineer Surveyor to Lloyd's Register of Shipping

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