

# REPORT ON WATER TUBE BOILERS. No. 7376

Received at London Office  
 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. 1959  
 (Number of Visits 6)  
 the diesel electric icebreaker "LENINGRAD"  
 Helsingfors, Finland By whom built Wärtsilä-koncernen A/B Yard No. 366 When built 1959  
 By whom made Engine No. When made  
 at Helsingfors, Finland By whom made (Wärtsilä-koncernen A/B Boiler No. 2861 When made 1959  
 Owners Maskin och Bro 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/cm<sup>2</sup> Tested by Hydraulic Pressure to 18.5 kg/cm<sup>2</sup> of Test 18.12.1959  
 Can each boiler be worked separately yes Total Heating Surface of Boilers 130 m<sup>2</sup>  
 No Area of Fire Grate (coal) in each Boiler oil fired  
 one 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 cm<sup>2</sup>  
 as fitted 77 cm<sup>2</sup> Pressure to which they  
 10 kg/cm<sup>2</sup> 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  
 Steam Drums:—Number in each boiler one Inside diameter 914 mm  
 Range of tensile strength 41-47 kg/mm<sup>2</sup> Are drum shell plates welded  
 If fusion welded, state name of welding firm Wärtsilä-koncernen A/B Maskin och Bro Have all the requirements of the Rules  
 Description of riveting:—Circ. seams long. seams  
 Pitch of rivets Thickness of straps Percentage strength of  
 Diameter of tube holes in drum 25.4/38.4 mm of tube holes 38.8/59 mm  
 Range of tensile strength 41-47 kg/mm<sup>2</sup>  
 Size of manhole or handhole 300 x 400 mm Water Drums:—Number  
 Range of tensile strength 41-47 kg/mm<sup>2</sup> drum shell plates  
 Have all the requirements of the Rules  
 Description of riveting:—Circ. seams long. seams  
 Pitch of rivets Thickness of straps  
 Diameter of tube holes in drum 25.4/38.4 mm Pitch of tube holes 38.8/59 mm  
 Range of tensile strength 41-47 kg/mm<sup>2</sup>  
 Size of manhole or handhole 106/121 mm  
 Tested by hydraulic pressure to  
 Number 576 and 95 Steam Dome or Collector:—Description of  
 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  
 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  
 Description of riveting:—Circ. seams long. seams  
 Pitch of rivets Thickness of straps Percentage strength of  
 Diameter of tube holes in drum Pitch of tube holes Percentage strength of  
 Range of tensile strength  
 Size of manhole or handhole Number, diameter, and thickness of tubes  
 Is a safety valve fitted to each section of the superheater which  
 No. and description of safety valves Area of each set  
 Pressure to which they are adjusted Is easing gear fitted  
 Has the spare gear required by the Rules been supplied

The foregoing is a correct description,

Wärtsilä-koncernen A/B, Maskin och Bro *Heikki Haanisto* 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

For 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 workmanwhip found good.  
 er found fit for class subject to steam trial being carried out with satisfactory result.

Survey Fee ... Frk. 27,000:— When applied for 19  
 Travelling Expenses (if any) £ : : When received 19

Fee will be applied for upon return of  
 attached certificate No. 15.

FRIDAY 16 FEB 1962

Signature *Su Hfs 8382*

Engineer Surveyor to Lloyd's Register of Shipping.

012705-012710-0108