

Rpt. 5c.

## REPORT ON WATER TUBE BOILERS.

No. 20168

Received at London Office

Date of writing Report 2-5-19 63 When handed in at Local Office 19 Port of Copenhagen

No. in Survey held at Elsinore and Copenhagen Date, First Survey 19-1-62 Last Survey 5-4-19 63

Reg. Book. 92679 on the Steel Single Screw Motor Vessel "KOSMONAVT" (Number of Visits 18) Gross 10658 Tons Net 10658

Built at Copenhagen By whom built Burmeister & Wain A/S Yard No. 791 When built 1963-4

Engines made at Copenhagen By whom made Burmeister & Wain A/S Engine No. 7171 When made 1962-7

Boilers made at Elsinore By whom made Helsingør Skibsværft & Maskb. A/S Boiler No. 1269 When made 1962-3

HS for Register Book 77 m<sup>2</sup> Owners U.S.S.R. Port belonging to Odessa

**WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.**—Manufacturers of Steel HEADERS:— Uddeholm A/B, Storforsverken

Date of Approval of plan 15th January, 1962 Tubes:— Tube Product Ltd.— Oldbury No. and Description or Type of Boilers 1 off exhaust gas fired La Mont Boiler Working Pressure 7 kg/cm<sup>2</sup> Tested by Hydraulic Pressure to 14 kg/cm<sup>2</sup> Date of Test 12-3-62

No. of Certificate 1073 Can each boiler be worked separately yes Total Heating Surface of Boilers 77 m<sup>2</sup> Superheaters none

Half Economisers no Is forced draught fitted no Area of Fire Grate (coal) in each Boiler -

No. and type of burners (oil) in each boiler exhaust gas fired No. and description of safety valves on each boiler 1-single directly spring loaded 50 mm diam. Area of each set of valves per boiler per rule - as fitted - Pressure to which they are adjusted 7 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 the donkey boiler No main boilers Smallest distance between boilers or uptakes and bunkers or woodwork fitted in funnel with covers:— 2860 mm

Width and length inside diam. 2090 mm Steam Drums:—Number in each boiler 2 Inside diameter 217 mm Thickness of plates Range of tensile strength Are drum shell plates welded or flanged If fusion welded, state name of welding firm Have all the requirements of the Rules for Class I vessels been complied with Description of riveting:—Circ. seams long. seams

Diameter 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 shell in way of tubes Steam Drum Heads or Ends:—Range of tensile strength

Thickness of plates Radius or how stayed Size of manhole or handhole Water Drums:—Number in each boiler Inside diameter Thickness of plates Range of tensile strength Are drum shell plates welded or flanged If fusion welded, state name of welding firm Have all the requirements of the Rules for Class I vessels been complied with Description of riveting:—Circ. seams long. seams

Diameter 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 Water Drum Heads or Ends:—Range of tensile strength

Thickness of plates Radius or how stayed Size of manhole or handhole

Headers or Sections:—Number 1 off Material S.M. steel Thickness 8 mm Tested by hydraulic pressure to 20 kg/cm<sup>2</sup>

Tubes:—Diameter inside:— 26 mm Thickness 3 mm Number 8 double coils Steam Dome or Collector:—Description of joint to shell Inside diameter Thickness of shell plates Range of tensile strength Description of longitudinal joint If fusion welded, state name of welding firm Have all the requirements for the Rules for Class I vessels been complied with Diameter of rivet holes

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

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

**SUPERHEATER, Drums or Headers:**—Number in each boiler Inside diameter

Thickness Material Range of tensile strength Are drum shell plates welded or flanged If fusion welded, state name of welding firm Have all the requirements of the Rules for Class I vessels been complied with Description of riveting:—Circ. seams long. seams

Diameter 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

Radius 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

HELISINGØR SKIBSVÆRFT OG MASKINBYGGERIET  
4-V-62  
The foregoing is a correct description,  
MANUFACTURER

Dates of Survey During progress of work in shops - 1962:- 19/1-2/2-7/2-9/2-12/3- Is the approved plan of boiler forwarded herewith

while building During erection on board vessel - 9/1-14/1-21/1-30/1-8/2-11/2-13/2-14/2-18/2- Total No. of visits 18

7/3-3/4-4/4-5/4-63

Is this boiler a duplicate of a previous case yes If so, state vessel's name and report No. m.s. "BELOVODSK" Cpn Rpt. No. 19869

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) The boiler has been built under special survey in accordance with the Rules, the approved plans and the Secretary's letters. The material has been tested as required by the Rules and the workmanship is good. On completion of installation the boiler was examined under steam and the safety valve adjusted to 100 lbs. and the accumulation tested and found in order.

Survey Fee ... \$22,000 When applied for 19 62

Travelling Expenses (if any) \$15,000 When received 19

Date Committee's Minute Su Rpt 1

Engineer Surveyor to Lloyd's Register of Shipping

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