

REPORT ON BOILERS.

Date of writing Report 25-2-62 1962 When handed in at Local Office 1962 Port of Gdańsk
 Received at London Office.....
 No. in Reg. Book Survey held at Gdańsk Date, First Survey 7 April 1962 Last Survey 13 Feb. 1962
 on the M.T. "BALACLAVA" (Number of Visits.....) 13269,91
 Tons { Gross..... 8670,18
 Net.....
 Built at Gdańsk By whom built Stocznia Gdańska Yard No. B70/2 When built 1960-61
 Engines made at Poznań By whom made H.Cegielski Engine No. 006 When made 1960-10
 Boilers made at Gdańsk By whom made Stocznia Gdańska Boiler No. 1675 When made 1961
 MN as per Rule..... Owners USSR. Ministry of Shipping Port belonging to R I G A

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Huta "Batory", "Kosciuszko", "Jednosc"—Poland; Huta "Vitkovice"—Tschechoslov. & Duesseldorf.
 Total Heating Surface of Boilers 281,4 m² Of Superheaters None
 Total for Register Book 562,8 m² Is forced draught fitted Yes Coal or Oil fired Oil
 No. and Description of Boilers Two-Multitubular Marine Scotch Type Working Pressure 12,5 kgs/cm²
 Tested by hydraulic pressure to 22,5 kgs/cm² Date of test 29.06.61 No. of Certificate GDK 068 Can each boiler be worked separately Yes
 Area of Firegrate in each Boiler None No. and Description of safety valves to each boiler Two-Twin improved high lift
 Area of each set of valves per boiler { per Rule... 6330mm² as fitted... 7700mm² Pressure to which they are adjusted 12,5 kgs/cm² Are they fitted with easing gear yes
 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler -
 Smallest distance between boilers or uptakes and bunkers or woodwork - Is oil fuel carried in the double bottom under boilers no
 Smallest distance between boilers or uptakes and bunkers or woodwork - Is the bottom of the boiler insulated -
 Largest internal dia. of boilers 4820 m Length 3489m Shell plates: Material SM Steel Tensile strength -
 If fusion welded, state name of welding Firm Part Welded—Stocznia Gdańska Have all the requirements of the Rules for Class I vessels yes
 Thickness 32mm Part welded Longitud. Description of riveting: circ. seams { end... Double riveted
 Treble riveted Double (zig zag) LAP
 Butt Straps Diameter of rivet holes in { circ. seams... 32mm inter... 89,03mm
 long. seams... 32mm Pitch of rivets { 215 mm
 Percentage of strength of circ. end seams { plate... 64% rivets... 43.72% Percentage of strength of circ. intermediate seam { plate... 85.11% rivets... 84.87%
 Percentage of strength of longitudinal joint { plate... 87.2% rivets... 87.2%
 Thickness of butt straps { outer... 25mm inner... 28mm
 No. and Description of Furnaces in each Boiler Three-Morison Type
 Material SM. Steel Tensile strength 41 - 47 Kgs/mm² Smallest outside diameter 1161 mm (Corrugate)
1051 mm (Neck)
 Length of plain part { top... 228 mm Thickness of plates 18mm Description of longitudinal joint Welded
 bottom... 228 mm
 Dimensions of stiffening rings on furnace or c.c. bottom Furnace Corrugations 9 x 202 mm
 End plates in steam space: Material SM. Steel Tensile strength 41-47 Kgs/mm² Thickness 31mm Pitch of stays 480mm
 How are stays secured E W
 Tube plates: Material { front... SM Steel Tensile strength { 41-47 Kgs/mm² Thickness { 31 mm
 back... SM Steel 41-47 Kgs/mm² 24 mm
 Mean pitch of stay tubes in nests 178 mm Pitch across wide water spaces 1335 mm 339
 Girders to combustion chamber tops: Material SM. Steel Tensile strength 41-47 Kgs/mm² Depth and thickness of girder
 centre 160 x 22 mm Length as per Rule 156,3mm 640 Distance apart 200 mm No. and pitch of stays
 each None—Welded Girders
 Combustion chamber plates: Material SM Steel
 Tensile strength 41-47 Kgs/mm² Thickness: Sides 18mm Back 18mm Top 18mm Bottom 18mm
 Pitch of stays to ditto: Sides 232mm Back 190mm Top none Are stays fitted with nuts or riveted over side shell-stays
 No-E.W. Except screwed in shell
 Front plate at bottom: Material SM Steel Tensile strength 41-47 kgs/mm²
 Thickness 31mm
 Lower back plate: Material SM Steel Tensile strength 41-47 kgs/mm² Thickness 31mm
 Pitch of stays at wide water space 190 mm 385 Are stays fitted with nuts or riveted over No - E.W.
 Main stays: Material Steel Tensile strength 41-47 Kgs/mm²
 Diameter { At body of stay... 76mm No. of threads per inch None
 Over threads... -
 New stays: Material Steel Tensile strength 41-48 kgs/mm²
 Diameter { At turned off part... 40mm, 50mm No. of threads per inch None - EW
 Over threads... 60mm

Are the stays drilled at the outer ends Yes - 5mm dia - 60 mm deep Margin stays: Diameter 38 mm
 { At turned off part, or Over threads... 45 mm

No. of threads per inch 5 in Shell

Tubes: Material Steel External diameter { Plain... 63,5 Stay... 63,5 Thickness { 4mm 6 & 10mm No. of threads per inch None - E.W.

Pitch of tubes 89mm Manhole compensation: Size of opening in shell plate 475 x 57 mm Section of compensating ring 1155 x 925 x 40mm No. of rivets and diameter of rivet holes 42 & 37 mm dia

Outer row rivet pitch at ends 236 mm Depth of flange if manhole flanged 110mm Steam Dome: Material -

Tensile strength - Thickness of shell - Description of longitudinal joint -

Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint { Plate... - Rivets... -

Internal diameter - Thickness of crown - No. and diameter of stays - Inner radius of crown -

How connected to shell - Size of doubling plate under dome - Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell -

Type of Superheater - Manufacturers of { Tubes... - Steel forgings... - Steel castings... -

Number of elements - Material of tubes - Internal diameter and thickness of tubes -

Material of headers - Tensile strength - Thickness - Can the superheater be shut off and the boiler be worked separately - Is a safety valve fitted to every part of the superheater which can be shut off from the boiler -

Area of each safety valve - Are the safety valves fitted with easing gear -

Pressure to which the safety valves are adjusted - Hydraulic test pressure tubes - forgings and castings - and after assembly in place - Are drain cocks valves fitted to free the superheater from water where necessary -

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes

Z-ca Dyr. Naczelnego
 The foregoing is a correct description,
 of a Produkcyj Silników
 Manufacture
mgr inż. R. Peszkowski

Dates of Survey while building { During progress of work in shops - - } 7.4; 11, 17, 26, 27, 5; 2, 12.6.61 Are the approved plans of boiler and superheater forwarded herewith Yes
 (If not state date of approval.)
 { During erection on board vessel - - - } See Mach'y Report Total No. of visits -

Is 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.) The Multitubular Marine oil fired Scotch Type, Polish design PA3 Auxiliary Boilers, described herein have been constructed under Special Survey abd in accordance with the Rules, approved plans and Secretary's letters.

The materials used and the workmanship are of good quality, and the Boilers have been efficiently installed on board the M.T. "BALACLAVA"

The Safety valves have been adjusted to lift at 12,5kgs/cm². A steam accumulation test has been carried out with satisfactory results.

In our opinion these Boilers are eligible to be classed with the Main Machinery.

Compression rings distances:

Port Boiler		Stbd.s. Boiler	
Inbd S.V.	Outbd S.V.	Inbd.S.V.	Outbd S.V.
Inbd.	Outbd.	Inbd.	Outbd.
8,0m	12,0m	12,2m	11,6m
		11,3m	9,8m
			12,7m

26.2.62

Survey Fee zł 10,237 & £ 195-0-0 When applied for, 31-1-1962
 -10% zł 9,215 & £ 175.10.-
 Travelling Expenses (if any) £ - When received 19.....

G. Mansen
 Engineer Surveyor to Lloyd's Register of Shipping
M. Chudla

Committee's Minute FRIDAY 27 APR 1962
 Assigned See Rpt 1