

Rpt. 13.

REPORT ON ELECTRIC FITTINGS.

No. 2846

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report

15/5 1925

When handed in at Local Office

8.7

1025 Port of

FINNE

No. in Survey held at

FINNE

Reg. Book.

71041

on the

STEEL TWIN SC. SA. YUMANOV

Date, First Survey

Last Survey

(Number of Visits.....)

19

Built at

MALMÖ

By whom built

MOCHUMS M.V. ANTIEB

Tons

Gross 1482

Net 566

Owners

DUBROVAKA PAROBRODSKA

PLOVIDBA

Yard No.

91

When built

1907

Electric Light Installation fitted by

MALMÖ MOCHUMS M.V. AKT.

Port belonging to

DUBROVNIK

Contract No.

When fitted

1907

System of Distribution

DOUBLE WIRE SYSTEM

Pressure of supply for Lighting

110

volts, Heating

Direct or Alternating Current, Lighting

DIRECT

volts, Power

If alternating current system, state frequency of periods per second

Power

volts.

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

YES

YES

Generators, do they comply with the requirements regarding overload

are they compound wound

SHUNT

Where more than one generator is fitted are they arranged to run in parallel

No

is an adjustable regulating resistance fitted in

series with each shunt field

Are all terminals accessible and clearly marked

YES

Are the lubricating arrangements of the generators as per Rule

YES

Position of Generators

ENGINE PLATFORM

is the ventilation in way of the generators satisfactory

YES

are they clear of all inflammable material

YES

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators

YES

YES

are their axis of rotation fore and aft

Earthing, are the bedplates and frames of the generating plant efficiently earthed

YES

their respective generators in metallic contact

YES

are the prime movers and

Main Switch Boards, where placed

NEAR DYNAMOS

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard

YES

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes

YES

are they protected from mechanical injury and damage from water, steam or oil

YES

woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards

YES

are they constructed wholly of durable, incombustible non-absorbent materials

YES

insulated from the slab with mica or micanite and the slab similarly insulated from its framework

YES

frame effectively earthed

YES

accessibility of all parts

YES

Are the following fittings as per Rule, viz.:— spacing or shielding of live parts

YES

bars

YES

individual fuses to voltmeter, pilot or earth lamp

YES

proportion of omnibus

YES

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

DOUBLE POLE LINK SWITCHES

Instruments on main switchboard

3

ammeters

3

volts

synchronising device for paralleling purposes

LAMPS

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

YES

YES

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules

Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule

W248-0205(12)

Lloyds Register Foundation

Insulation of Cables, state type of cables, single or twin SING. are the cables insulated and protected as per Tables III or IV of the Rules YES.

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 square inch and above provided with soldering sockets YES.

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage YES.

Support and Protection of Cables, state how the cables are supported and protected BRASS CLIPS.

If cables are run in wood casings, are the casings and caps secured by screws —, are the cap screws of brass —, are the cables run in separate grooves —. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI YES.

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements

Joints in Cables, state if any, and how made, insulated, and protected METALIC JUNCTION BOXES.

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES.

Bushes in Beams and Non-watertight Positions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed — state the material of which the bushes are made IN TUBES.

Earthing Connections, state what earthing connections are fitted and their respective sectional areas —

—, are their connections made as per Rule —

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule YES.

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven —

Navigation Lamps, are these separately wired YES., controlled by separate switch and separate fuses YES.

are the fuses double pole YES., are the switches and fuses grouped in a position accessible only to the officers on watch YES.

has each navigation lamp an automatic indicator as per Rule YES., are separate screens provided for the use of oil and electric side lights YES.

are separate oil lanterns provided for the mast head lights and side lights YES.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight YES.

are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected NONE

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected GAS TIGHT

LAMPS AND SWITCHES.

BERGMAN TUBES.

where are the controlling switches situated OUTSIDE OF SPACES.

Searchlight Lamps, No. of TWO, whether fixed or portable FIXED, are their fittings as per Rule YES.

Arc Lamps, other than searchlight lamps, No. of NONE, are their live parts insulated from the frame or case —, are their fittings as per Rule —

Motors, are their working parts readily accessible —, are the coils self-contained and readily removable for replacement —

are the brushes, brush holders, terminals and lubricating arrangements as per Rule —, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material —

are they protected from mechanical injury and damage from water, steam or oil — are their axis of rotation fore and aft —

if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type —

—, if not of this type, state distance of the combustible material horizontally or vertically above the motors — and —

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed as per Rule —

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule YES.

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings —

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office —

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No of	RATED AT				DRIVEN BY.	FUEL USED.	Flash Point of Fuel.
		Kilowatts.	Volts.	Ampères.	Revs. per Min.			
MAIN ...	<u>2</u>	<u>135-87</u>	<u>110</u>	<u>135-87</u>	<u>8400</u>	<u>Steam Cyl. Bore & TURBINE ENG.</u>	<u>—</u>	<u>—</u>
AUXILIARY ...	<u>1</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>410</u>	<u>STEAM CYL. ENGINE.</u>	<u>—</u>	<u>—</u>
EMERGENCY ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
ROTARY TRANSFORMER	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
<u>ONE</u>	MAIN GENERATOR...	<u>2</u>	<u>101</u>	<u>24</u>	<u>1.9</u>	<u>85.00</u>	<u>—</u>	<u>rubber</u>	<u>Armoured</u>
<u>TWO</u>	AUXILIARY GENERATOR	<u>2 1/2</u>	<u>35/50</u>	<u>19/19</u>	<u>1.8/2.6</u>	<u>50.00</u>	<u>—</u>	<u>rubber</u>	<u>Armoured</u>
	EMERGENCY GENERATOR	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	ROTARY TRANSFORMER...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	AUXILIARY SWITCHBOARDS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	ENGINE ROOM ...	<u>2</u>	<u>10</u>	<u>4</u>	<u>1.35</u>	<u>8.65</u>	<u>60</u>	<u>rubber</u>	<u>Armoured</u>
	BOILER ROOM ...	<u>2</u>	<u>10</u>	<u>4</u>	<u>1.35</u>	<u>—</u>	<u>—</u>	<u>rubber</u>	<u>Armoured</u>
<u>1</u>	I CLASS STAR. SIDE	<u>2</u>	<u>25</u>	<u>19</u>	<u>1.3</u>	<u>16.16</u>	<u>130</u>	<u>rubber</u>	<u>Tubes</u>
<u>2</u>	I CLASS PORT SIDE	<u>2</u>	<u>25</u>	<u>19</u>	<u>1.3</u>	<u>9.94</u>	<u>115</u>	<u>rubber</u>	<u>Tubes</u>
<u>3</u>	I CLASS STAR. SIDE	<u>2</u>	<u>16</u>	<u>4</u>	<u>2.2</u>	<u>10.77</u>	<u>56</u>	<u>rubber</u>	<u>Tubes</u>
<u>4</u>	I CLASS PORT SIDE	<u>2</u>	<u>16</u>	<u>4</u>	<u>2.2</u>	<u>9.88</u>	<u>48</u>	<u>rubber</u>	<u>Tubes</u>
<u>5</u>	OFFICIER & SAIL. FIR.	<u>2</u>	<u>16</u>	<u>4</u>	<u>2.2</u>	<u>5.44</u>	<u>60</u>	<u>rubber</u>	<u>Tubes</u>
<u>6</u>	DECK.	<u>2</u>	<u>16</u>	<u>4</u>	<u>2.2</u>	<u>7.25</u>	<u>103</u>	<u>rubber</u>	<u>Armoured</u>
<u>8</u>	WIRELESS ...	<u>2</u>	<u>10</u>	<u>4</u>	<u>1.35</u>	<u>—</u>	<u>200</u>	<u>rubber</u>	<u>Armoured</u>
<u>9/10</u>	SEARCHLIGHT ...	<u>2</u>	<u>25</u>	<u>19</u>	<u>1.3</u>	<u>20/30</u>	<u>812/320</u>	<u>rubber</u>	<u>Armoured</u>
<u>11</u>	MASTHEAD LIGHT...	<u>2</u>	<u>6</u>	<u>4</u>	<u>1.1</u>	<u>7.00</u>	<u>195/360</u>	<u>rubber</u>	<u>Armoured</u>
<u>12/13</u>	SIDE LIGHTS ...	<u>2</u>	<u>6</u>	<u>4</u>	<u>1.1</u>	<u>(0.2)</u>	<u>320</u>	<u>rubber</u>	<u>Armoured</u>
	COMPASS LIGHTS ...	<u>2</u>	<u>0.94</u>	<u>1</u>	<u>1.1</u>	<u>(0.2)</u>	<u>—</u>	<u>rubber</u>	<u>Leads</u>
	POOP LIGHTS ...	<u>2</u>	<u>6</u>	<u>4</u>	<u>1.1</u>	<u>—</u>	<u>250</u>	<u>rubber</u>	<u>Armoured</u>
	CARGO LIGHTS ...	<u>2</u>	<u>6</u>	<u>4</u>	<u>1.1</u>	<u>5/5</u>	<u>220</u>	<u>rubber</u>	<u>Armoured</u>
	ARC LAMPS ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	HEATERS ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	MAIN BILGE LINE PUMPS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	GENERAL SERVICE PUMP	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	EMERGENCY BILGE PUMP	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	SANITARY PUMP ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	CIRC. SEA WATER PUMPS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	CIRC. FRESH WATER PUMPS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	AIR COMPRESSOR ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	FRESH WATER PUMP ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	ENGINE TURNING GEAR	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	ENGINE REVERSING GEAR	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	LUBRICATING OIL PUMPS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	OIL FUEL TRANSFER PUMP	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	WINDLASS ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	WINCHES, FORWARD	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	WINCHES, AFT	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	STEERING GEAR ...	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	WORKSHOP MOTOR	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
	VENTILATING FANS	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

5189.
All Conductors are of annealed copper conforming to British Standard Specification No. 7.
The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.
The foregoing is a correct description.

✓
Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying Ampères feet from standard compass feet from steering compass.

A cable carrying .5 Ampères 6 feet from standard compass 6 feet from steering compass.

A cable carrying .2 Ampères in the feet from standard compass in the feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted

The maximum deviation due to electric currents was found to be

compass, and degrees on

degrees on

course in the case of the standard

course in the case of the steering compass.

Builder's Signature.

Date

Is this installation a duplicate of a previous case

If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The quality of the workmanship is good. Installation generally excellent and repaired as recommended, auxiliary main switch found renewed. Voltmeter ammeter renewed. I class circuit now found. Main and auxiliary dynamos tested 35% over load as per rules with satisfactory results.

LAMPS AND SWITCHES.

BERLIN TUBES.

OUTSIDE OF SPACES.

It is submitted that this vessel is eligible for THE RECORD. Elec. light.

GAS TIGHT

TWO

FIXED

YES.

44 KW.

See alterations to Electric Equipment 5/36

Total Capacity of Generators 28.2 Kilowatts

The amount of Fee

£1600

When applied for,

6/7/25

Travelling Expenses (if any) £

When received,

£1654

Committee's Minute

FRI. 24 JUL 1925

Assigned

Elec Lt

Surveyor to Lloyd's Register of Shipping.

FRI. 29 APR 1927

FRI. 21 AUG 1925

FRI. 26 FEB 1926

TUES. 23 MAR 1926

TUES. 27 JUL 1926

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