

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

18 AUG 1930

Received at London Office

Date of writing Report 9<sup>th</sup> August, 1930 When handed in at Local Office

10 Port of HAMBURG

No. in Survey held at Hamburg

Date, First Survey 21<sup>st</sup> June, Last Survey 31<sup>st</sup> July, 1930

Reg. Book.

on the Steel S. "VIGRID"

(Number of Visits)

Tons { Gross 7356.19  
Net 4366.86

Built at Hamburg

By whom built Deutsche Werft A-G. Yard No. 141

When built 1930

Owners Skibsaktieselskapet "Vigrid", Bruun &amp; K. Lippé

Port belonging to Tønsberg

Electric Light Installation fitted by A.E.G. Allgemeine Elektr. Gesellsch. Contract No. When fitted 1930

System of Distribution Two wire two-conductor system, separate conductors, except small areas

Pressure of supply for Lighting 110 volts, Heating ☒ volts, Power 220 volts.

Direct or Alternating Current, Lighting direct Power direct

If alternating current system, state frequency of periods per second ☒Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off ☒Generators, do they comply with the requirements regarding rating ☒ , are they compound wound ☒are they over compounded 5 per cent. ☒ , if not compound wound state distance between each generator ☒Where more than one generator is fitted are they arranged to run in parallel ☒ , is an adjustable regulating resistance fitted in series with each shunt field ☒Are all terminals accessible, clearly marked, and furnished with sockets ☒ , are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched ☒Are the lubricating arrangements of the generators as per Rule ☒

Position of Generators Engine Room, port side

is the ventilation in way of the generators satisfactory ☒ , are they clear of all inflammable material ☒if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators ☒and ☒ , are the generators protected from mechanical injury and damage from water, steam or oil ☒are their axes of rotation fore and aft ☒Earthing, are the bedplates and frames of the generating plant efficiently earthed ☒ are the prime movers and their respective generators in metallic contact ☒

Main Switch Boards, where placed Engine Room, port side, special elevated platform

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 ☒Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes ☒are they protected from mechanical injury and damage from water, steam or oil ☒ , if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards ☒are they constructed wholly of durable, non-ignitable non-absorbent materials ☒ , is all insulation of high dielectric strength and of permanently high insulation resistance ☒if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework ☒and is the frame effectively earthed ☒ Are the fittings as per Rule regarding: — spacing or shielding of live parts ☒, accessibility of all parts ☒ , absence of fuses on back of board ☒ , proportion of omnibus bars ☒, individual fuses to voltmeter, pilot or earth lamp ☒ , connections of switches ☒

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

A fuse on each pole and a double pole linked switch. For each outgoing circuit: A fuse on each pole and a double pole switch.

Instruments on main switchboard 4 ammeters 2 voltmeters ☒ synchronising device for paralleling purposes.

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

Voltmeter with Ohm scale.

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules ☒Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule ☒

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009969-009978-0058 1/2



Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq.-ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Load and Return). Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ... ..		<i>m</i>		<i>m</i>		<i>m</i>		
	MAIN BILGE LINE PUMPS ...	<i>1</i>	<i>6</i>	<i>19</i>	<i>0.64</i>	<i>25</i> ✓	<i>50</i>		
	GENERAL SERVICE PUMP ...								
	EMERGENCY BILGE PUMP ...								
	SANITARY PUMP ... ..	<i>1</i>							
	CIRC. SEA WATER PUMPS ...	<i>2</i>	<i>50</i>	<i>19</i>	<i>1.83</i>	<i>100</i> ✓	<i>80</i>		
	CIRC. FRESH WATER PUMPS	<i>2</i>	<i>16</i>	<i>19</i>	<i>1.04</i>	<i>50</i> ✓	<i>80</i>		
	AIR COMPRESSOR & ... ..	<i>2</i>	<i>120</i>	<i>61</i>	<i>1.5</i>	<i>200</i> ✓	<i>40</i>		
	FRESH WATER PUMP ... ..	<i>1</i>	<i>2.5</i>	<i>2</i>	<i>1.78</i>	<i>15</i> ✓	<i>50</i>		
	ENGINE TURNING GEAR ...	<i>1</i>	<i>10</i>	<i>19</i>	<i>0.82</i>	<i>50</i> ✓	<i>50</i>		
	ENGINE REVERSING GEAR ...								
	LUBRICATING OIL PUMPS ...	<i>Combined Circ. Sea Water pumps.</i>							
	OIL FUEL TRANSFER PUMP	<i>1</i>	<i>25</i>	<i>19</i>	<i>1.3</i>	<i>80</i>	<i>40</i>		
	WINDLASS ... ..								
	WINCHES, FORWARD ... ..								
	WINCHES, AFT ... ..								
	STEERING GEAR—								
	(a) MOTOR GENERATOR...	<i>4</i>	<i>25</i>	<i>19</i>	<i>1.3</i>	<i>60</i> ✓	<i>90</i>		
	(b) MAIN MOTOR ... ..								
	WORKSHOP MOTOR 3 ... ..	<i>See Exlor</i>							
	VENTILATING FANS ... ..								
	Boiler Blower	<i>2</i>	<i>2.5</i>	<i>2</i>	<i>1.78</i>	<i>20</i> ✓	<i>100</i>		
	Lathe	<i>1</i>	<i>1.5</i>	<i>2</i>	<i>1.38</i>	<i>15</i>	<i>120</i>		
	Drillig. Machine	<i>1</i>	<i>1.5</i>	<i>2</i>	<i>1.38</i>	<i>10</i>			
	Refr. engine	<i>1</i>	<i>6</i>	<i>19</i>	<i>0.64</i>	<i>35</i> ✓	<i>60</i>		
	Oil separator	<i>1</i>	<i>1.5</i>	<i>2</i>	<i>1.38</i>	<i>10</i>	<i>16</i>		



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.

ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT

ABT. I. SCHIFFBAU

BAUBUREAU HAMBURG

Electrical Engineers.

Date

11. 8. 30.

#### COMPASSES.

Distance between electric generators ~~or motors~~ and standard compass about 60 m

Distance between electric generators ~~or motors~~ and steering compass about 62 "

The nearest cables to the compasses are as follows:—

A cable carrying 0.2 Ampères close to feet from standard compass close to feet from steering compass.

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

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

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

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

The maximum deviation due to electric currents was found to be nil degrees on \_\_\_\_\_ course in the case of the standard compass, and nil degrees on \_\_\_\_\_ course in the case of the steering compass.

DEUTSCHE WERFT  
AKTIENGESELLSCHAFT

*[Signature]*

111a Blühorn

Builder's Signature.

Date

Is this installation a duplicate of a previous case no If so, state name of vessel \_\_\_\_\_

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

electric installation are of good quality. Rules respecting conductors of this Society have been applied generally, as the German Standards are used in this construction. The installation has been built under Special Survey in accordance with the requirements of the Rules, the approved plans and the Secretary's Letters. It has given full satisfaction under full working and manoeuvring conditions and is eligible in my opinion to be classed in the Society's Reg. Book with Record of "Electric Light"

Electric Light

DT 20/8/30

*[Signature]*

Total Capacity of Generators 144 Kilowatts.

The amount of Fee ... £ 33 : 14 : 12 8 30

When applied for,

Travelling Expenses (if any) £ - : - : 16 10 30

When received,

*[Signature]*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 26 AUG 1930

Assigned

Electric Light

Im. 238.—Transfer.  
The Surveyors are requested not to write on or below the space for Committee's Minute.



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