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No. 41162

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL) [3 SEP 1930]
Received at London Office

of writing Report 1: 9. 1930 When handed in at Local Office 2 Sept 1930 Port of Hull

in Survey held at Hull & Goole Date, First Survey 8 Aug Last Survey 29 Aug 1930
 (Number of Visits.....)

33 on the Steamer S.S. 'SANFRY' Tons { Gross 945.81
 Net 471.40

and built at Goole By whom built Goole S.B. & Co. Ltd Yard No. 290 When built 1930

owners James Hargreaves & Sons (Leds) Ltd belonging to Goole

Electric Light Installation fitted by Humber Electrical Co. Ltd Contract No. When fitted 1930

the Vessel fitted for carrying Petroleum in bulk No

System of Distribution Two wire

Pressure of supply for Lighting 110 volts, Heating ✓ volts, Power ✓ volts.

Direct or Alternating Current, Lighting Direct current Power ✓

alternating current system, state frequency of periods per second ✓

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

ic test generators, do they comply with the requirements regarding rating ✓, are they compound wound ✓

s or rate they over compounded 5 per cent. ✓, if not compound wound state distance between each generator ✓

ere more than one generator is fitted are they arranged to run in parallel ✓, is an adjustable regulating resistance fitted in ✓

es with each shunt field ✓

ion, all terminals accessible, clearly marked, and furnished with sockets ✓, are they so spaced or shielded that they cannot be accidentally earthed, ✓

Manuf't circled, or touched ✓ Are the lubricating arrangements of the generators as per Rule ✓

sition of Generators Starboard side of engine room ✓

the ventilation in way of the generators satisfactory ✓, are they clear of all inflammable material ✓

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 ✓

been their axes of rotation fore and aft ✓

urthing, are the bedplates and frames of the generating plant efficiently earthed ✓ are the prime movers and ✓

the ir respective generators in metallic contact ✓. Direct coupled

main Switch Boards, where placed Beside generator in engine room.

If the generators and main switchboard are not placed in the same compartment, is each generator provided with ✓

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 ✓ and ✓

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 mica-nile 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 ✓

✓, 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 S.P. linked

Switch for generator. Outgoing circuits controlled by S.P. switches & ✓

protected by fuses on each pole

instruments on main switchboard one ammeters one 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

Earth lamps, with separate switches.

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

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



004603-004611-0087

Cables: Single, twin, concentric, or multicore Yes are the cables insulated and protected as per Tables IV or V of the Rules Yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 75 lbs

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 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 None

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 L.C. cables with brass clips. Armoured cables with G.I. clips.

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

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements None

Joints in Cables, state if any, and how made, insulated, and protected No joints

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 Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed Yes state the material of which the bushes are made Lead

Earthing Connections, state what earthing connections are fitted and their respective sectional areas through earth lamps

are their connections made as per Rule Yes

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 None

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

Secondary Batteries, are they constructed and fitted as per Rule 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 None

how are the cables led None

where are the controlling switches situated None

Searchlight Lamps, No. of 1, whether fixed or portable Yes, are their fittings as per Rule Yes

Arc Lamps, other than searchlight lamps, No. of 1, are their live parts insulated from the frame or case Yes, are their fittings as per Rule Yes

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

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

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

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 Yes

if not of this type, state distance of the combustible material horizontally or vertically above the motors None and None

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

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 Yes

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

PARTICULARS OF GENERATING PLANT.									
DESCRIPTION OF GENERATOR.	No of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.		
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.	
MAIN	1	3.75	110	34	490	Steam engine			
AUXILIARY									
EMERGENCY									
ROTARY TRANSFORMER									

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR	2	064	19	16	34	-	15	V.P.R.	
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER									
MOTOR GENERATOR									
ENGINE ROOM	2	0018	3	20	6	-	45	V.P.R.	Lead lined
BOILER ROOM	2		3	20	38	-		V.P.R.	Lead lined
AUXILIARY SWITCHBOARDS									
ACCOMMODATION	2	002	7	18	170	-	160		Lead lined
WIRELESS									
SEARCHLIGHT									
MASTHEAD LIGHT	2	003	3	22	5	-	195		Lead lined
SIDE LIGHTS	2	003	3	22	5	-	15		
COMPASS LIGHTS									
POOP LIGHTS									
CARGO LIGHTS									
ARC LAMPS									
HEATERS									

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
BALLAST PUMP										
MAIN BILGE LINE PUMPS										
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP										
SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR										
FRESH WATER PUMP										
ENGINE TURNING GEAR										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR										
VENTILATING FANS										

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.

FOR THE HUMBLY ELECTRICAL ENGINEERING CO.

W. S. Shuckworth Electrical Engineers.

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass 100 ft.

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying 2 Ampères 70 feet from standard compass 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. yes

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 10 degrees on any course in the case of the standard compass, and 10 degrees on any course in the case of the steering compass.

R. J. ...

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 electrical installation

of this vessel has been fitted on board under Special Survey, tried under full working conditions & found good.

It is eligible in my opinion to have record of "Electric Light"

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

W. H. Waggott 4/9/30

Total Capacity of Generators 3.75 Kilowatts.

The amount of Fee ... £ 4 : 00

When applied for, 7 Sept 1930

Travelling Expenses (if any) £ :

When received, 30/10/30

W. H. Waggott
Surveyor to Lloyd's Register of Shipping.
for Self & J. H. Mackindley

Committee's Minute TUE. 23 SEP 1930

Assigned Elec. Light

Im. 1228.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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