

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 20.7.37 When handed in at Local Office 20.8.37 Port of HULL
 No. in Survey held at Hull Date, First Survey 28 June 1937 Last Survey 13 July 1937
 Reg. Book. 17701 on the Steam Trawler "ITALIA CAESAR" (Number of Visits.....)
 Built at Beverley By whom built Book, Walton & Gemmel Ltd Yard No. 625 When built 1937-7
 Owners The Earl Steam Towing Co., Ltd Port belonging to Grimsby
 Electric Light Installation fitted by Kimber Electrical Engineering Co. Contract No. 1937
 Is the Vessel fitted for carrying Petroleum in bulk No

System of Distribution

Two Wire Insulated

Pressure of supply for Lighting

100

volts, Heating

100

volts, Power

Direct or Alternating Current, Lighting

Direct

Power

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

Yes

Generators, do they comply with the requirements regarding temperature rise

Yes

are they compound wound

Yes

are they over compounded 5 per cent.

Yes

if not compound wound state distance between each generator

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

Yes

Have certificates of test results for machines under 100 kw. been submitted and

approved

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing

Are all terminals accessible, clearly marked, and furnished with sockets

Yes

are they so spaced or shielded that they cannot be accidentally earthed,

short circuited, or touched

Yes

Are the lubricating arrangements of the generators, as per Rule

Yes

Position of Generators

Starboard side of engine room

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

and

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

Yes

are their axes of rotation fore and aft

Yes

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

Yes

are the prime movers and their respective generators

in metallic contact

Yes

Main Switch Boards, where placed

Beside generators

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

Yes

are they protected from mechanical

injury and damage from water, steam or oil

Yes

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

Yes

is all insulation of high dielectric strength and of permanently high insulation resistance

Yes

is it of an approved type

Yes

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

Yes

is the non-hygroscopic insulating material of an approved

type

Yes

and is the frame effectively earthed

Yes

Are the fittings as per Rule regarding:— spacing or shielding of live parts

accessibility of all parts

Yes

absence of fuses on back of board

Yes

temperature rise of

omnibus bars

Yes

individual fuses to voltmeter, pilot or earth lamp

Yes

are moving parts of switches alive in the

"off" position

No

are all screws and nuts securing connections effectively locked

Yes

are any fuses fitted on the live side of

switches

No

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

Double pole switches for each generator. Outgoing circuits single pole switches.

Are turbine driven generators fitted with emergency trip switch as per rule

Are cupboards or compartments containing switchboards composed of

fire-resisting material or lined with approved material

Instruments on main switchboard

One

ammeters

One

voltage

synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

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

Earth lamps

Switches, Circuit Breakers and Fusible Cut-outs,

do these comply with the requirements of the Rules

Yes

are the fusible cutouts of an approved type

Yes

have the reversed

current protection devices been tested under working conditions

construction, protection, insulation, material, and position of these as per rule

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

If the cables are insulated otherwise than as per Rule, are they of an approved type

any point of the installation under maximum load

area of 0.04 square inch and above provided with soldering sockets

If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound, or waterproof insulating tape

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

Support and Protection of Cables, state how the cables are supported and protected *Lead covered clips. Lead covered cables with 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

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

Joints in Cables, state if any, and how made, insulated, and protected

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

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed

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

Navigation Lamps, are these separately wired, controlled by separate switch and separate fuses, are the fuses double pole

are the switches and fuses grouped in a position accessible only to the officers on watch

has each navigation lamp an automatic indicator as per Rule

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

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

where are the controlling switches situated

are all fittings suitably ventilated

Heating and Cooking Appliances, are they constructed and fitted as per Rule

Searchlight Lamps, No. of *One*, whether fixed or portable

Arc Lamps, other than searchlight lamps, No. of *Fixed*, are their fittings as per Rule

Motors, are their working parts readily accessible

are the brushes, brush holders, terminals and lubricating arrangements as per Rule

inflammable gases cannot accumulate and clear of all inflammable material

water, steam or oil

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

have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing

field and motor speed regulators, starters and controllers constructed and fitted as per Rule

are required, are these fitted as per Rule

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

are all fuses of the filled cartridge type

If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office

Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule

Joint Boxes, Section and Distribution Boards, is the

Full [of] Pressure, state maximum between bus bars and

Cable Sockets, are the ends of all cables having a sectional

Paper Insulated and Varnished Cambric Insulated Cables.

Cable Runs, are the cables fixed as far as possible in accessible positions

are the cap screws of brass

are the cables run in

are the clips spaced as per Table VIII

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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	12	100	120	400	Steam Engine		
AUXILIARY	1	4	100	40	1000	Diesel Engine		
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	Circuit.	Rule.			
MAIN GENERATOR	1	1200	37	.064	120	130	34	V.I.R.	Lead covered
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR	1	2025	7	.064	40	46	30	V.I.R.	"
EMERGENCY GENERATOR									
ROTARY TRANSFORMER									
ENGINE ROOM	1	.0015	1	.044	2	6.1	20	V.I.R.	"
BOILER ROOM	1	.0015	1	.044	2	6.1	30	V.I.R.	"
AUXILIARY SWITCHBOARDS									
ACCOMMODATION	1	.0100	7	.044	20	31	25	V.I.R.	"
	1	.0070	7	.036	9	24	18	V.I.R.	"
	1	.0225	7	.064	30	35	100	V.I.R.	"
FISH ROOM	1	.0030	3	.036	9	27	80	V.I.R.	"
NAVIGATION MAIN	1	.0030	3	.036	3	29	85	V.I.R.	"
WIRELESS	1	.0100	7	.044	15	31	80	V.I.R.	"
SEARCHLIGHT	1	.0070	7	.036	10	24	15	V.I.R.	"
MASTHEAD LIGHT	1	.0015	1	.044	6	7.8	19	V.I.R.	"
SIDE LIGHTS	1	.0015	1	.044	6	7.8	20	V.I.R.	Lead covered
COMPASS LIGHTS	1	.0015	1	.044	6	7.8	25	V.I.R.	Lead covered
POOP LIGHTS									
CARGO LIGHTS									
ARC LAMPS									
HEATERS	1	.0030	3	.036	10	12	15	V.I.R.	Lead covered

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Nominal 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 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

Geo Rauchause & Co.

Electrical Engineers.

Date June 25-37

COMPASSES.

Distance between electric generators or motors and standard compass

70 ft

Distance between electric generators or motors and steering compass

65 ft

The nearest cables to the compasses are as follows :-

A cable carrying 5 Ampères 16 feet from standard compass feet from steering compass.

A cable carrying 5 Ampères 16 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 No degrees on Any course in the case of the standard compass, and No degrees on Any course in the case of the steering compass.

COOK, WELTON & GEMMELL LTD.

W D Clamper
CHIEF DRAUGHTSMAN.

Builder's Signature.

Date 28.6.37

Is this installation a duplicate of a previous case Yes

If so, state name of vessel

Steam Trawler "DADEMAN"

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 and found in order.

MOTOR CONDUCTORS

Noted

26/8/37

Total Capacity of Generators 16 Kilowatts.

The amount of Fee ... £ 8 : 0 : 21 AUG 1937

Travelling Expenses (if any) £ :

When received.

11.9.37 13/9

J. A. Orle
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 27 AUG 1937

Assigned

See F.E mchly opt.



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Foundation