

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 16 JAN 1930

Date of writing Report 29-12-1929 When handed in at Local Office

19 Port of Rotterdam

No. in Survey held at

Flushing

Date, First Survey

21-6-29

Last Survey

18-12-

1929

Reg. Book.

on the Steel screw Motor ship "POELAU TELLO"

(Number of Visits 16)

Tons

Gross 9242

Net 3661

Built at

Flushing

By whom built

Hoon Mr. De Schelde

Yard No.

185

When built

1929

Owners

Hoon Mr. Nederland

Port belonging to

Amsterdam

Electric Light Installation fitted by

Ch. V. Groeneveld & Co

Contract No.

When fitted 1929

Is the Vessel fitted for carrying Petroleum in bulk

No

System of Distribution

Two wire system, direct current.

Pressure of supply for Lighting

220

volts, Heating

—

volts, Power

220 & 110

volts.

Direct or Alternating Current, Lighting

direct current

Power direct and alternating current.

If alternating current system, state frequency of periods per second

50 per

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 rating

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

Yes

is an adjustable regulating resistance fitted in

series with each shunt field

Yes

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

in Main motor room, Two on Starboard, One on Port side

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

in the main motor room

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

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

and is the frame effectively earthed

Yes

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

Yes

accessibility of all parts

Yes

absence of fuses on back of board

—

proportion of omnibus

bars

Yes

individual fuses to voltmeter, pilot or earth lamp

Yes

connections of switches

Yes

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

The generators are running in parallel and provided with a current breaker in the equalizer and in the minus pole and an automatic contactor in the plus pole. One overload trip in latter.

Instruments on main switchboard

14

ammeters

3

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

Two Ohm meters

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

Yes

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

Yes



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Cables: Single, twin, concentric, or multicore ✓ 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 27

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 —

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 On perforated steel plates or in wooden channels

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 Yes

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

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 In steering engine room is placed a battery of 135 cells which feeds in case of emergency the steering gear and the navigation and main motor room lighting

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 —

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

—, how are the cables led

where are the controlling switches situated —

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

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

Motors, are their working 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 —, 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 and fitted as per Rule Yes

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

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 —



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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 ...	3	240 each	220	1000	✓	Diesel motor	Diesel oil	
AUXILIARY ...								
EMERGENCY ...								
ROTARY TRANSFORMER								

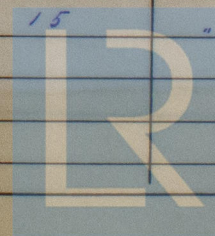
GENERATOR, LIGHTING AND HEATING CONDUCTORS.

[illegible]

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	1	1	0.10090	19	.003	100✓	118	180	Rubber	Armoured
MAIN BILGE LINE PUMPS ...	1	1	0.0396	19	.052	50✓	64	180	"	"
GENERAL SERVICE PUMP ...	—	—	—	—	—	—	—	—	—	—
EMERGENCY BILGE PUMP ...	—	—	—	—	—	—	—	—	—	—
SANITARY PUMP	1	1	0.06000	19	.064	80✓	83	120	"	"
CIRC. SEA WATER PUMPS ...	2	2	0.30240	37	.103	280✓	480	60	"	"
CIRC. FRESH WATER PUMPS...	—	—	—	—	—	—	—	—	—	—
AIR COMPRESSOR	—	—	—	—	—	—	—	—	—	—
FRESH WATER PUMP	—	—	—	—	—	—	—	—	—	—
ENGINE TURNING GEAR ...	1	1	0.00455	7	.029	31✓	18.2	100	"	"
ENGINE REVERSING GEAR ...	1	1	0.06000	19	.064	40✓	83	150	"	"
LUBRICATING OIL PUMPS ...	2	2	0.11680	37	.064	125✓	130	80	"	"
OIL FUEL TRANSFER PUMP ...	2	2	0.10990	19	.003	110✓	118	120	"	"
WINDLASS	1	1	0.40640	61	.093	275✓	288	100	"	"
WINCHES, FORWARD	5	5	0.10090	37	.064	125✓	130	80	"	"
WINCHES, AFT	4	4	0.10090	19	.003	100✓	118	100	"	"
GENERATOR	2	2	0.07592	19	.072	80✓	97	600	"	"
MOTOR	2	2	0.00701	7	.036	15✓	24	120	"	"
FANS	47	1	0.00699	3	.036	0.8✓	12	30	"	"
Compressor	2	5	0.30240	37	.103	1200✓	1200	80	"	"
Water pump	5	7	0.00701	7	.036	15✓	24	30	"	"
Water pump	1	1	0.00455	7	.036	8✓	18.2	15	"	"
Water pump	2	1	0.00455	7	.029	8✓	10.2	15	"	"
Water pump	1	1	0.03960	19	.052	53✓	64	20	"	"
Water pump	1	1	0.00455	7	.029	8✓	18.2	15	"	"
Long pump	1	1	0.00701	7	.036	20✓	24	10	"	"

Feedpump.	h	1	0.4985	61	.103	306. ✓	332	200 60.	"	"
Deep tank oil pump	1	1	0.19640	3727	.083	184 ✓	184	100	"	"
Laundry motor	1	1	0.00299	3	.036	12 ✓	12	120	"	"
Galley	h	1	0.00102	1	0.36	4 ✓	4.1	40	"	"
Monkey boiler fan	h	1	0.00299	3	.036	8.4 ✓	12	80	"	"
Converter motor	1	1	0.11009	19	.083	116. ✓	110	15	"	"



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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.

N.V. Groeneveld, van der Poll & Co's

Electrotechnische Fabriek

J. Groeneveld

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass 240

Distance between electric generators or motors and steering compass 240

The nearest cables to the compasses are as follows:—

A cable carrying 4 Ampères 10 feet from standard compass 10 feet from steering compass.

A cable carrying 3 Ampères 10 feet from standard compass 10 feet from steering compass.

A cable carrying 2 Ampères 2 feet from standard compass 2 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 0 degrees on every course in the case of the standard compass, and 0 degrees on every course in the case of the steering compass.

N. V. KON. MY. "DE SCHELDE".

J. W. Smit

Builder's Signature.

Date 10 Jan. 1930.

Is this installation a duplicate of a previous case Yes If so, state name of vessel POELDA BRASS, POELDA RUEBIAN

General Remarks (State quality of workmanship, opinions as to class, &c. This installation has

been fitted in accordance with the Society's Rules, material and workmanship good. The whole installation was found in a good working condition when tried and merits in my opinion the Committee's approval.

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

Blec. Light

G. M.

17/1/30.

Total Capacity of Generators 420 Kilowatts.

The amount of Fee ...

£ 594

When applied for,

20/12.1929.

Travelling Expenses (if any) £

When received,

3/1.1930.

H. J. Oetova

Secretary to Lloyd's Register of Shipping.

Committee's Minute

FRI 17 JAN 1930

Assigned

Blec. Light

Im1223.—Transfer.
(The Surveymen are requested not to write on or below the space for Committee's Minute.)



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