

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 8th March 1935 When handed in at Local Office

Received at London Office

No. in Survey held at Tamag
Reg. Book.

Port of Tamag
Date, First Survey 8th October 1914 Last Survey 23rd January 1935

on the Steel Twin Screw Tug Locomotive Hopper Dredger "Chien She" (Number of Vessels 1)
Tons { Gross
Net

Built at Tamag By whom built Wm. F. Whitham S. M. C. & Co. Yard No. 1301 When built 1934

Owners Whangpo Conservancy Board Port belonging to Shanghai

Electric Light Installation fitted by Wm. F. Whitham S. M. C. & Co. Contract No. When fitted 1934

Is the Vessel fitted for carrying Petroleum in bulk no

System of Distribution

Pressure of supply for Lighting 110 Volt volts, Heating volts, Power 110 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 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 yes, 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 yes 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 aft engine room on starboard 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 no

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 aft engine room on starboard side between aft generator and ship side

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 no

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

is the non-hygroscopic insulating material of an approved type , 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 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 single pole linked switch for main generator, double pole linked switch for emergency generator, distribution board, workshop motor, wire less station, single pole running switch for upper counter.

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 of teak wood

Instruments on main switchboard 3 ammeters 3 voltmeters synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection yes

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system The voltmeters of both main generators are arranged for testing earth.

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

014721

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.

W. Schmidt

Electrical Engineers.

Date 11.3.35

COMPASSES.

Distance between electric generators or motors and standard compass *in generator and motor outside of engine room*

Distance between electric generators or motors and steering compass *—*

The nearest cables to the compasses are as follows:—

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

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A cable carrying Amperes 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 *nil* degrees on course in the case of the standard compass, and *nil* degrees on course in the case of the steering compass.

Lillie

Builder's Signature.

Date 11.3.35

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. *The installation of the electric*)

plant has been surveyed continually from the commencement of the work to the finishing and was found to be in accordance with the Rules of this Society and with the approved plans. The workmanship was found to be of highest quality. The generators have been tested on the trial station of Messrs. Lillie when testing the motive engines for a duration of a 10 hours trial with maximum load, and for a 1/2 of an hour with 25% overload and were found working satisfactory in every respect.

It is recommended to the favourable consideration of the Committee to place the vessel name in the Society's Register Book with record "L.M.C. with date" as may be decided by the Committee.

Noted

L.F.

15/3/35.

Total Capacity of Generators *45* Kilowatts.

The amount of Fee ... £ *Inclusive* When applied for, *19*

Travelling Expenses (if any) £ *charged* When received, *on Bill Report*

Jr. Lillie

Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 19 MAR 1935*

TUE. 27 AUG 1935

Assigned

See F.E. Rpt.



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