

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office. 15 SEP 1949

Date of writing Report 31st August 1949 When handed in at Local Office 5.9.1949 Port of GLASGOW.

No. in Survey held at PORT GLASGOW Date, First Survey 24th FEBRUARY Last Survey 25th JULY 1949
Reg. Book. (No. of Visits 8)

40005 on the BUCKET DREDGER 'MERSEY ENGINEER' Tons Gross 249 Net 287

Built at PORT GLASGOW By whom built FERGUSON BROS (PORT GLASGOW) LTD Yard No. 388 When built 1949

Owners MERSEY DOCKS & HARBOUR BOARD Port belonging to LIVERPOOL

Installation fitted by J. CHARTERS When fitted 1949

Is vessel equipped for carrying Petroleum in bulk No Is vessel equipped with D.F. E.S.D. Gy.C. Sub.Sig. Radar

Plans, have they been submitted and approved YES System of Distribution TWO WIRE Voltage of Lighting 110 Volts

Heating Power 110 Volts D.C. or A.C., Lighting D.C. Power D.C. If A.C. state frequency

Prime Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fitted with a trip switch Generators, are they compound wound YES, and level compounded under working conditions YES

if not compound wound state distance between generators and from switchboard Are the generators arranged to run in parallel No, are shunt field regulators provided YES Is the compound winding connected to the negative or positive pole

NEGATIVE Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing Have certificates of test for machines under 100 kw. been supplied YES and the results found as per Rule YES

Position of Generators STARBOARD SIDE OF ENGINE ROOM

is the ventilation in way of generators satisfactory YES are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil YES Switchboards, where are main switchboards placed ADJACENT TO GENERATORS

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil YES, what insulation is used for the panels FITTINGS MOUNTED ON INSULATED STEEL PIPES if of synthetic insulating material is it an Approved Type YES, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule Is the construction as per Rule, including locking of screws and nuts YES Description of Main Switchgear for each generator and arrangement of equaliser switches 150 AMP D.P. KNIFE PATTERN SWITCH WITH FUSES

and the switch and fuse gear (or circuit breakers) for each outgoing circuit 100 AMP OR 60 AMP D.P.C.O. SWITCHES WITH FUSES.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Instruments on main switchboard Two ammeters Two voltmeters synchronising devices. For compound machines in parallel are the ammeters and reversed current protection devices connected on the pole opposite to the equaliser connection Earth Testing, state means provided EARTH LAMPS

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type YES, make of fuses FERGUSON & MUNRO LTD, are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate and at what current do the reversed current protective devices operate

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule YES

Cables, are they insulated and protected as per Rule YES, if otherwise than as per Rule are they of an Approved Type state maximum fall of pressure between bus bars and any point under maximum load 5 Volts, are the ends of all cables having a sectional area of 0.01 square inch and above provided with soldering sockets YES Are all paper insulated and varnished cambric insulated cables sealed at the ends YES Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage YES, are any cables laid under machines or floorplates YES, if so, are they adequately protected YES Are cables in machinery spaces, galleys, laundries, etc., lead covered YES or run in conduit or of the "HR" type State how the cables are supported or protected MAINS: L.C. CABLES CLIPPED TO STEEL TRAY MACHINERY SPACE - L.C. CABLE CLIPPED TO STEEL TRAY OR STEELWORK ACCOMMODATION: - L.C. CABLE CLIPPED TO WOODWORK

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES, where unarmoured cables pass through beams, etc., are the holes effectively bushed YES Refrigerated chambers, are the cables and fittings as per Rule



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.
 All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.
 The foregoing is a correct description.

J. Charters, Electrical Contractors. Date *31st Aug. 1949*

COMPASSES.

Have the compasses been adjusted under working conditions... *YES*

Peter Ferguson Builder's Signature. Date *1st Sept 49.*

Have the foregoing descriptions and schedules been verified and found correct... *YES*

Is this installation a duplicate of a previous case... *No* If so, state name of vessel... *✓*

Plans. Are approved plans forwarded herewith... *No* If not, state date of approval... *7th FEBRUARY 1949.*

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith... *YES*

General Remarks. (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The electrical installation of this vessel has been fitted on board under Special Survey tested under working conditions and found satisfactory. The quality of materials and workmanship is good.

Notes in 20/10/49

Total Capacity of Generators... *25* Kilowatts.

The amount of Fee ... £ *31 : 5* :
 Travelling Expenses (if any) £ ... *10* :
 When applied for, *At GRK* 19
 When received, 19

J. M. Spindler
 Surveyor to Lloyd's Register of Shipping.

GLASGOW 14 SEP 1949

Committee's Minute
 Assigned **SEE ACCOMPANYING MACHINERY REPORT**

201.9.40—Transfer. (MADE AND PRINTED IN ENGLAND.)
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)