

Rpt. 13.

No. 36211

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 8 OCT 1949
Sunderland

Date of writing Report 20 -9-49 19 When handed in at Local Office 19 Port of Sunderland
No. in Survey held at Sunderland Date, First Survey 16-7-49 Last Survey 16-9-49 19
Reg. Book. (No. of Visits 10)
on the s.s. "GEMMA" Tons { Gross 5146
Net 2516
Built at Sunderland By whom built J.L. Thompson & Sons Ltd Yard No. 663 When built 1949
Owners Anglo-Saxon Petroleum Co. Ltd Port belonging to London
Installation fitted by Sunderland Forge & Engineering Co. Ltd When fitted 1949
Is vessel equipped for carrying Petroleum in bulk. yes 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 2-wire ins. Voltage of Lighting 110
Heating - Power 110 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 Engine room starboard on raised stools
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. on angle iron framework
on platform near 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. ebony "Sindanyo", 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. - Description of Main Switchgear
for each generator and arrangement of equaliser-switches. a double-pole quick-break knife switch and double-pole
fuse.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit as for generators

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule. yes Instruments on main switchboard 2
ammeters 2 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 E lamps

Switches, Circuit-Breakers and Fuses, are they as per Rule. yes, are the fuses an Approved Type. yes
make of fuses "Zed", 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. -

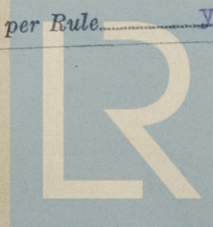
Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule. yes

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. less than 6 v. 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. no, if so, are they
adequately protected. - 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. main feeders along main tank deck
in iron pipe : In accommodation, L.C.B. cables on the surface and protected where required
by metal guards.

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. yes



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Foundation

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory..... yes

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN	2	Sunderland Forge	25	110	227	675	steam	Sunderland Forge
EMERGENCY ...								
ROTARY								
TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULA- TION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR No. 1	25	1	37/.072	227 ✓	246	66	V.C.	L.C.A.B.
" " EQUALIZER No. 2	25	1	37/.072	227 ✓	246	72	V.C.	L.C.A.B.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR...								

[illegible][illegible][illegible]

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.

Sunderland Forge & Eng Co Ltd. Electrical Contractors. Date 19. 9. 1949
N. S. Gurney

COMPASSES.

Have the compasses been adjusted under working conditions yes

FOR AND ON BEHALF OF
JOSEPH L. THOMPSON & SONS, LIMITED.

Builder's Signature.

Date 21/9/49.

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 yes If not, state date of approval -

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 equipment of this vessel has been installed under special survey in accordance with the approved plans and the "Rules For Electrical Equipment": The materials and workmanship are good: Upon completion, trials of the equipment were witnessed as satisfactory and the insulation resistance of all circuits was measured and found good. This equipment is in my opinion suitable for a classed vessel.

Noted SUR 24/11/49

Total Capacity of Generators (2x25) 50 Kilowatts.

The amount of Fee ... £47. 10. 0.

When applied for,

OCT 17 1949

When received,

19

Travelling Expenses (if any) £

B. D. Mann
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned