

Rpt. 13.

# REPORT ON ELECTRICAL EQUIPMENT

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 31st JULY 1950 When handed in at Local Office 11 AUG 1950 Received at London Office

No. in Reg. Book. Survey held at KOBE JAPAN Date, First Survey 2nd MAY Last Survey 18th MAY Port of KOBE

on the STEEL SINGLE SCREW STEAMER "YUKIKAWA MARU" (No. of Visits)

Built at KOBE

By whom built KAWASAKI JUKOGYO K.K. Yard No. 648 When built SEP

Owners KAWASAKI KISEN K.K.

Port belonging to KOBE

Installation fitted by KAWASAKI JUKOGYO K.K.

Is vessel equipped for carrying Petroleum in bulk NO Is vessel equipped with D.F. YES E.S.D. YES Gy. C. NO Sub. Sig. NO Radar NO When fitted SEPT, 1948

Plans, have they been submitted and approved YES System of Distribution 2 WIRE INSUL. Voltage of Lighting 105V

Heating - Power 105V 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 YES, are shunt field regulators provided YES

NEGATIVE POLE. 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 - and the results found as per Rule -

Position of Generators STARBOARD, FRAME No. 57 TO 59, JUST ON THE FLOOR IN 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 STARBOARD, FRAME No. 55 TO 56, JUST ON THE FLOOR IN ENGINE ROOM

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 SYNTHETIC INSULATION MATERIAL

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 TO EACH GENERATOR, 3 POLES CIRCUIT BREAKER WITH OVER

CURRENT PROTECTION & REVERSE CURRENT TRIP, TWO POLES FOR MAIN & ONE FOR

EQUALIZER CIRCUIT. and the switch and fuse gear (or circuit breakers) for each outgoing circuit A FUSE ON EACH POLE & A DOUBLE POLE

LINKED SWITCH.

Are compartments containing switchboards - material or lined as per Rule YES Instruments on main switchboard 2

ammeters 2 voltmeters - For compound machines in parallel are the ammeters and reversed current protection devices connected on the pole YES the equaliser connection YES

WITH METAL FILAMENT, NOT MORE THAN 15 W. Earth Testing, state means provided TWO LAMPS

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type -

make of fuses EBONITE CARTRIDGE, are all fuses labelled YES If circuit breakers are provided for the generators, at what overload do they operate 140 A

and at what current do the reversed current protective devices operate 20 A

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

Cables, are they insulated and protected as per Rule -, if otherwise than as per Rule are they of an Approved Type BY NK

state maximum fall of pressure between bus bars and any point under maximum load 5V, 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 YES

or of the "HR" type - State how the cables are supported or protected ON WEATHER DECK, IN CONTINUOUS TUBE, OTHER PARTS, SUPPORTED BY METAL CLIPS & PROTECTED BY METAL COVERS.

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 -

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ng, are the groups of lights in the engine and boiler rooms arranged as per Rule - Emergency Supply, state position

ships, are they separately wired YES controlled by separate double pole switches and fuses YES Are the switches and fuses in  
ble only to the officers on watch YES, is an automatic indicator fitted YES Is an alternative supply provided YES

batteries, are they constructed and fitted as per Rule YES, are they adequately ventilated YES

capacity in amperes hours 24V 24AH 2.5E75

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

y fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present -

how are they protected -

ere are the controlling switches fitted - Are all fittings suitably ventilated YES

rchlight Lamps, No. of -, whether fixed or portable -, are they of the carbon arc or of the filament type -

ating and Cooking, is the general construction as per Rule -, are the frames effectually earthed -, are heaters in the

accommodation of the convection type -. Motors, are all motors constructed and installed as per Rule and placed in well-ventilated

compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil -

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump

compartment -. Have motors of 100 BHP and over been inspected by the Surveyor during manufacture and testing -

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule -

Control Gear and Resistances, and they constructed and fitted as per Rule -. Lightning Conductors, where required are they fitted as per

Rule -. Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been

complied with -, are all fuses of an Approved Cartridge Type -, make of fuse - Are the fittings for pump

rooms, tween deck spaces, etc., in accordance with the special requirements for such ships -. Are the cables lead covered as per Rule -

E. S. D., if fitted state maker TOKYO KEIKI CO. LTD location of transmitter F.No.80 BOTTOM and receiver F.No.96 BOTTOM

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations YES

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.	Amperes.	Revs. per Min.	TYPE.	MAKER.
MAIN	2	KAWASAKI JUKOGYO KK.	15	110	136	450	RECIPRO. STEAM ENGINE	
EMERGENCY ROTARY TRANSFORMER								

#### GENERATOR CABLES

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAX. IN. IN THE CIRC.	INSULA-TION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq.-ins. or Sq. mm.			
MAIN GENERATOR	15	1	37/1.83	136	RUBBER	LEAD & ARMOURED
" " EQUALISER	8	1	19/1.83	76	"	"
EMERGENCY GENERATOR						
ROTARY TRANSFORMER: MOTOR						
" " GENERATOR						

#### MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

DESCRIPTION.							
SECTION BOX "SA" FROM MAIN SWITCH BOARD	1	7/1.63	36	46	250	RUBBER	LEAD & ARMOURED
" " "SB"	1	7/1.63	34	46	220	"	"
" " "SF"	1	7/1.74	14	18.2	250	"	"
LIGHTING DISTRIBUTION BOX "L10"	1	1/1.63	9	12.9	220	"	"
" " "L11"	1	7/1.74	15	18.2	150	"	"
" " "L12"	1	7/1.74	10	18.2	150	"	"
WIRELESS SWITCH BOARD	1	37/1.9	60	18.2	290	"	"
NAVIGATION LIGHT INDICATOR	1	7/1.74	2	18.2	210	"	"

#### LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet)	INSULA-TION.	PRO.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq.-ins. or Sq. mm.	In the Circuit.	Rule.			
LIGHTING DIS. BOX "L1" FROM SECTION BOX "SA"	1	7/1.74	9.5	18.2	120	RUBBER	LEAD
" " "L2"	1	7/1.74	8.2	18.2	10	"	"
" " "L3"	1	1/1.63	7.8	12.9	60	"	"
" " "L4"	1	1/1.63	8.5	12.9	90	"	"
NAVIGATION LIGHT INDICATOR	1	7/1.74	2.0	18.2	110	"	"
LIGHTING DIS. BOX "L6" FROM SECTION BOX "SB"	1	7/1.12	18	31	230	"	LEAD & ARMOURED
" " "L8"	1	7/1.12	16	31	240	"	"
" " "L5" FROM LIGHTING DIS. BOX "L6"	1	7/1.12	7	31	240	"	"
" " "L9"	1	7/1.12	9	31	260	"	"
FAN DIS. BOX "F1" FROM FAN SECTION BOX "SF"	1	1/1.63	8	12.9	70	"	LEAD
" " "F2"	1	1/1.63	6	12.9	90	"	"

#### MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
TURNING MOTOR FROM MAIN SWITCH BOARD	1	3	1	7/1/12	28✓	31	100	RUBBER	LEAD & ARMOURD
L.OIL PURIFIER	1	2	1	7/1/12	20✓	31	120	"	"



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equipment is installed in accordance with the approved plans and the requirements of the Rules.  
Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.  
g is a correct description.

Electrical Contractors. Date

ES.

Have the compasses been adjusted under working conditions. YES

A. Nara

Builder's Signature.

Date 31st July 1950.

### NOT BUILT UNDER SURVEY

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. 16-3-1950

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

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

SEE REPORT 9 ATTACHED (NO. 174)

Noted SEN 13/10/50

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... £ 24,192 00

When applied for,

19

When received,

19

Travelling Expenses (if any) £ - : - :

L. T. B. ... & ...  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 20 OCT 1950

Assigned

See FF. ...

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

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