

Rpt. 13.

No. 3104.

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 9th June, 1952. When handed in at Local Office 11th June 1952. Received at London Office.

Port of M A L M Ö

No. in Survey held at Malmö

Date, First Survey 17th April Last Survey 30th May, 1952.

Reg. Book.

(No. of Visits 11)

41109s on the M/T "SOYA-MARGARETA"

Tons { Gross 10,628
Net 7,906

Built at Malmö

By whom built Kockums Mek. Verkst. AB Yard No. 343

When built 1952.

Owners Rederi A.-B. Soya

Port belonging to Stockholm

Installation fitted by Kockums Mek. Verkstads A.-B.

When fitted 1952.

Is vessel equipped for carrying Petroleum in bulk yes Is vessel equipped with D.F. yes E.S.D. yes Gy.C. yes Sub.Sig. - Radar yes

Plans, have they been submitted and approved yes System of Distribution Two wire insulated Voltage of Lighting 110

Heating 220 Power 220 D.C. or A.C., Lighting DC Power DC 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 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 yes Have certificates of test for machines under 100 kw. been supplied yes and the results found as per Rule yes

Position of Generators One starboard side, one port side 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 on a platform, port side, 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 dead front switchboard, if of synthetic insulating material is it an Approved Type - 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 Three pole circuit breakers with overload and reverse current trips on two poles. On third pole equalizer switch, interlocked as required by Rules.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit a fuse on each pole and a double-pole lined switch.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule. yes Instruments on main switchboard 8

ammeters 6 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. yes Earth Testing, state means provided 2 ohm-meters

Switches, Circuit Breakers and Fuses, are they as per Rule. yes, are the fuses an Approved Type. yes, make of fuses Laur. Knudsen, Copenh., are all fuses labelled. yes If circuit breakers are provided for the generators, at what overload do they operate at 10 % and at what current do the reversed current protective devices operate 30 A

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 6 % 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. - 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 L.C. and STA cables in M.R. and on Deck are clipped to surface plates or trays and under floor plates in M.R. covered by steel channel plates. L.C. cables in accommodation are clipped to surface or to wood grounds

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

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

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN ... Harbour	2	ASEA	200	230	870	350	Heavy oil	eng. Kockums M.V.A/
	1	Clarke Chapman & Co.Ld.	75	230	326	550	Steam.	C.Chapman & Co. Id.
EMERGENCY ... ROTARY TRANSFORMER	2	ESAB	25	115	218	1450	El.Motor	ESAB

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (load plus return feet ft.)	INSULATION.	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	200	4	185	870	4x232	60	Rubber	L.C. and S.T.A.
" " EQUALISER		8	185		8x232	60	Rubber	L.C. and S.T.A.
Harbour Generator	75	2	120	326	2x175	15	Rubber	L.C. and S.T.A.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR	31	1	120	150	175	35	Rubber	L.C. and S.T.A.
" " GENERATOR...	25	1	185	227	232	35	Rubber	L.C. and S.T.A.

DESCRIPTION.							
C 1-oil separator, pumps	1	70	114	124	23	Rubber	L.C. and S.T.A.
C 2-hydrophor pumps, nozzle cool. pumps etc.	1	70	85	124	22	Rubber	L.C. and S.T.A.
C 3-workshop motors	1	50	82	98	74	Rubber	L.C. and S.T.A.
C 4-ventilators, laundrymotors	1	35	54	77	66	Rubber	L.C. and S.T.A.
C 5-galley installation	1	120	122	175	60	Rubber	L.C. and S.T.A.
C 6-E S D Radar, Gyro etc.	1	70	100	124	140	Rubber	L.C. and S.T.A.

[illegible]

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Lubricating oil pumps	2	46	1	150	170	202	m 82	Rubber	L.C. and S.T.A.
S.W. pumps	2	36	1	120	136	175	" 70	"	"
F.W. pumps	2	30	1	70	113	124	" 68	"	"
Fire pump	1	21	1	50	82	98	18	"	"
Cooling N.pumps for aux.mot	1	10	1	16	39	48	64	"	"
Turning gear	1	16	1	35	64	77	64	"	"
Traverse crane		6.5	1	10	27	38	35	"	"
Steering gear	2	24	1	50	93	98	70	"	"
From C 1									
Fuel oil separators	2	8	1	10	30	38	19	"	"
Fuel oil transfer pump	1	5	1	6	21	29	13	"	"
Bilge pump	1	8	1	10	32	38	5	"	"
From C 2									
Hydrophor pumps	2	2	1	2.5	9	13	11	"	"
Nozzle cooling pump	2	1.3	1	1.5	6	7	35	"	"
Lubr.oil separator	1	7	1	10	28	38	35	"	"
Refrigerator	1	5	1	6	22	29	38	"	"
From C 3									
Lathe	1	5	1	6	20	29	22	"	"
Drilling machine	1	1.8	1	2.5	8	13	20	"	"
Grinding machine	1	0.35	1	2.5	7	13	7	"	"
Shaping machine	1	2	1	2.5	9	13	13	"	"
Welding transformer	1	8	1	10	30	38	-	"	"

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.

KOCKUMS
MEKANISKA VERKSTÄDS AKTIEBOLAG
ELEKTRISKA AVDELNINGEN

Electrical Contractors.

Date 11th June, 1952.

COMPASSES.

Have the compasses been adjusted under working conditions. yes.

KOCKUMS
MEKANISKA VERKSTÄDS AKTIEBOLAG

Builder's Signature.

Date 11th June, 1952.

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. 17.4.52

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 has been made under special survey in accordance with the requirements of the Rules and the approved plans. The workmanship is good, so the materials used.

It is submitted this el. installation is eligible to be accepted for classed motor tanker.

Noted 20.11.1.7.52

Total Capacity of Generators 475 Kilowatts.

The amount of Fee	Mmo. ... Kr.	: 1680:-	When applied for,
	Skm. Kr.	420:-	11-6-1952.
	Skm.		When received,
Travelling Expenses (if any)	Kr.	: 46:60	19

Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 8 JUL 1952

Assigned See F.E. mch. rpt.