

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 28356.

Port of Sandefjord Date of First Survey 13/2-25 Date of Last Survey 12-5-25 No. of Visits 3
 No. in Reg. Book 71182 on the Iron or Steel from 26 GROSHOLM Part belonging to Oslø
 Built at Rødby By whom Akt. Rødby Slams Jernskibes When built 1920-7
 Owners Skibs A/S Grindstad (B.S. Markensum Ny) Owners' Address _____
 Yard No. _____ Electric Light Installation fitted by Os. Faunus msk. Ner Kater When fitted 1925.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two dynamos. One 6 1/2 KW. (ASEA) direct driven by 10 HP hot bulb eng. (Atlas Diesel)
 One 5 KW. Thomas B. Thorge. belt driven.
 Capacity of Dynamo 30 and 23 Amperes at 220 Volts, whether continuous or alternating current continuous
 Where is Dynamo fixed Port side of Engine room. Whether single or double wire system is used double wire
 Position of Main Switch Board Port side of engine room having switches to groups 8 groups of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each In alleyways aft, in pantry and in chart house. 2-4 switches

If fuses are fitted on main switch board to the cables of main circuit Yes and on each auxiliary switch board to the cables of auxiliary circuits Yes and at each position where a cable is branched or reduced in size Yes and to each lamp circuit Yes
 If vessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits _____
 Are the fuses of non-oxidizable metal Yes and constructed to fuse at an excess of 20% per cent over the normal current
 Are all fuses fitted in easily accessible positions Yes Are the fuses of standard dimensions Yes If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit No wire fuses.
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes.

Total number of lights provided for 52 arranged in the following groups:—
 Engine room
 A 2 groups of 8 lights each of 25 candle power requiring a total current of about 2.0 Amperes
 B one group of 4 lights each of 25 candle power requiring a total current of " 0.5 Amperes
 C one group of 8 lights each of 25 candle power requiring a total current of " 1.00 Amperes
 D 2 groups of 4 lights each of 25 candle power requiring a total current of " 1.00 Amperes
 E One group of 5 lights each of 25 candle power requiring a total current of " 0.6 Amperes
2 Mast head light with 2 lamps each of 25 candle power requiring a total current of " 0.25 Amperes
2 Side light with 2 lamps each of 25 candle power requiring a total current of " 0.25 Amperes
3 Cargo lights of 96 candle power, whether incandescent or arc lights Incandescent.

If arc lights, what protection is provided against fire, sparks, &c. None fitted
 Where are the switches controlling the masthead and side lights placed In chart house

DESCRIPTION OF CABLES.

Main cable carrying 30 Amperes, comprised of _____ wires, each S.W.G. diameter, 2 x 6 3/4 square inches total sectional area
 Branch cables carrying 10 Amperes, comprised of _____ wires, each S.W.G. diameter, 2 x 2 1/2 square inches total sectional area
 Branch cables carrying 10 Amperes, comprised of _____ wires, each S.W.G. diameter, 2 x 1 1/2 square inches total sectional area
 Leads to lamps carrying 20 Amperes, comprised of _____ wires, each S.W.G. diameter, 2 x 1 1/2 square inches total sectional area
 Cargo light cables carrying 10 Amperes, comprised of _____ wires, each S.W.G. diameter, 2 x 1 1/2 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Steel protected lead cable in free air, engine room, holds and alleyways.
Ordinary lead cable in accommodations.

Joints in cables, how made, insulated, and protected Joints fitted in brass boxes.
 Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Yes Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage Yes
 Are there any joints in or branches from the cable leading from dynamo to main switch board No
 How are the cables led through the ship, and how protected Tied with cramp iron. See above.

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Steel protected lead cable

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat No cables in the neighborhood of mentioned places.

What special protection has been provided for the cables near boiler casings Steel protected lead cables, partially in pipes

How are cables carried through beams Lead sockets through bulkheads, &c. Brass boxes, rubber packing.

How are cables carried through decks Galvanized pipes with rubber packing.

Are any cables run through coal bunkers No or cargo spaces Yes or spaces which may be used for carrying cargo, stores, or baggage Yes

If so, how are they protected Lead tight under deck, steel protected lead cable.

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage plug connections in holds.

If so, how are the lamp fittings and cable terminals specially protected Watertight switches and boxes, plate covered

Where are the main switches and fuses for these lights fitted On main switch board.

If in the spaces, how are they specially protected Plate covered

Are any switches or fuses fitted in bunkers No

Cargo light cables, whether portable or permanently fixed Portable How fixed —

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel —

How are the returns from the lamps connected to the hull —

Are all the joints with the hull in accessible positions —

Is the installation supplied with a voltmeter Yes and with an amperemeter Yes, fixed Main switch board

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas Yes.

Are any switches, fuses, or joints of cables fitted in the pump room or companion —

How are the lamps specially protected in places liable to the accumulation of vapour or gas —

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than _____ megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

M. S. Franmes mek. Verkastet Electrical Engineers Date 18 Mai 1925

COMPASSES.

Distance between dynamo or electric motors and standard compass About 120'

Distance between dynamo or electric motors and steering compass — " — 120'

The nearest cables to the compasses are as follows:—

A cable carrying	<u>0,08</u>	Amperes	} <u>Light house lamps.</u>	feet from standard compass	feet from steering compass
A cable carrying		Amperes		feet from standard compass	feet from steering compass
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

The maximum deviation due to electric currents, etc., was found to be _____ degrees on _____ course in the case of the standard compass and _____ degrees on _____ course in the case of the steering compass.

M. S. FRAMNES MEK. VERKASTET Builder's Signature. Date 12th May 1925.

GENERAL REMARKS.

The installation is fitted according to the rules of Velynet for elektricitetsvesenhet. (The Norwegian State Board of Electricity), tried and found in good order.

It is submitted that this vessel is eligible for THE RECORD, Elec. Light. J.W.D. Fergin Roli.
5/4/25 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

2a.11.20.—Transfer.