

10

No. 6182.

Port of Copenhagen Date of First Survey 4th June Date of Last Survey 20th July 21 No. of Visits 6
No. in Reg. Book 33000 on the ~~Iron or Steel~~ SL. SR. "THORS DAL" (YARD N^o 19) Port belonging to Christiania
Built at Nalby By whom P. R. Sührs Master of Skibsbyggeri When built 1921
Owners Nelson & Nelson Owners' Address Nansen p. Larvik
Yard No. 19 Electric Light Installation fitted by a/s. T. Sührs, Nalby When fitted 1921

DESCRIPTION OF DYNAMO, ENGINE, ETC.

a compound wound dynamo directly coupled to a vertical single cylinder steam engine.

Capacity of Dynamo 70 Amperes at 110 Volts, whether continuous or alternating current Continuous.

Where is Dynamo fixed *in the engine room* Whether single or double wire system is used *double wire*.

Position of Main Switch Board in the engine room having switches to groups A, B, C, D, E, F, H of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each A: Crewspace in poop, 2 switches; B: Crewspace in forecabin, 2 switches; C: Starboard passage to saloon, 3 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 yes

Are the fuses of non-oxidizable metal yes and constructed to fuse at an excess of 100 - 150 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 Edison's tools used

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases *Yls.* ✓

Total number of lights provided for 111 arranged in the following groups:—

A 8 + 2 candel lights each of 16 candle power requiring a total current of 3.1 Amperes

B. 12 + 2 lights each of 16 candle power requiring a total current of 3.8 Amperes

31 + 6 lights each of 16-25-32 candle power requiring a total current of 52 Amperes

16 candle power requiring a total current of 2.0 Amperes

13 lights each of $\frac{1}{4}$ candle power requiring a total current of 2.0 Amperes

BOILER ROOM;	15	lights	10	0.5	
F COMPASSES & TELEGRAPH	3		16		
	2	lamps each of	32	candle power requiring a total current of	0.6 Amperes

25 candle power requiring a total current of 0.5 Amperes

2	Side light with	2	lamps each of	16	candle power, whether incandescent or are lights	0.2
1	STERN "	1	"	16	"	incandescent.

4	Cargo lights of	6116	main power, engine
H. EMERGENCY LIGHT	2 - 1 - "	16	No aux. lights

If arc lights, what protection is provided against fire, sparks, g.c. in arc light.

... and side lights placed in the Chart room

DESCRIPTION OF CABLES.

DESCRIPTION OF CABLES.

Main cable carrying 30 Amperes, comprised of 21 wires, each 1.7 S.W.G. diameter, 48 square inches total sectional area

Branch cables carrying 5.2 Amperes, comprised of 7 wires, each 1.35 S.W.G. diameter, 10 square inches total sectional area

Branch cables carrying 05 Amperes, comprised of 1 wires, each 1.38 S.W.G. diameter, 15 square inches total sectional area

Leads to lamps carrying 0.5 Amperes, comprised of 1 wires, each 1.38 S.W.G. diameter, 1.5 square inches total sectional area

Cargo light cables carrying 1 Amperes, comprised of 48 wires, each 0.2 S.W.G. diameter, 1.5 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

The copper wires are insulated with paper, lead covered and braided or taped and armoured with galvanized steel wire or two layers of steel tape and braided.

Joints in cables, how made, insulated, and protected *No joints in cables!*

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances ☒ 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 ☒

Are there any joints in or branches from the cable leading from dynamo to main switch board

How are the cables led through the ship, and how protected Secured by screwed clips and where necessary led

Thinsite galvanizes iron tubes.

777

W1098-0165

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 *The cables are lead covered and armoured with steel wire, where necessary they are led through galvanizes iron tubes.*

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *No cables near galleys etc.*

What special protection has been provided for the cables near boiler casings *Let through iron tubes.*

What special protection has been provided for the cables in engine room *as.*

How are cables carried through beams *armoured cables this iron tubes or lead through bulkheads, &c. watertight secured glands.*

How are cables carried through decks *through iron tubes.*

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

If so, how are they protected *armoured cables in iron tubes.*

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage *No*

If so, how are the lamp fittings and cable terminals specially protected *✓*

Where are the main switches and fuses for these lights fitted *✓*

If in the spaces, how are they specially protected *✓*

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 on 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 *✓*

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 2000 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.

P. PH. STUHRM MASKIN OG SKIBSBYGGERI

Electrical Engineers

Date 26/8 21.

COMPASSES.

Distance between dynamo or electric motors and standard compass *a. 12'*

Distance between dynamo or electric motors and steering compass *a. 12'*

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
15	16	12	
3	"	8	
0.15	to lamp in	feet from standard compass	to lamp in 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 0 degrees on all courses in the case of the standard compass and 0 degrees on all courses in the case of the steering compass.

P. PH. STUHRM MASKIN OG SKIBSBYGGERI

Builder's Signature.

Date 26/8 21.

GENERAL REMARKS. The Electric Lighting Installation as above described is in accordance with the Rule requirements, the apparatus plan and letters & dated 2/12 20, the material and workmanship being of good description. On the trial trip the whole installation was tried under full working power and found to work satisfactorily.

Recommend the vessel to have notation of "ELECTRIC LIGHT" in the Register Book.

See Mr. 180.951 7/9/21.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute



© 2020 Lloyd's Register Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.