

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 30,028

Port of Hull Date of First Survey 26.7.17 Date of Last Survey 4-7-17 No. of Visits 3
 No. in Reg. Book 799 on the Iron or Steel Stawler Max Pemberton Port belonging to Hull
 Built at Lloy By whom Bochum & Sons Ltd When built 1917-7
 Owners Livingston Steam Towing Co Owners' Address St Andrew's Dock Hull
 Yard No. 672 Electric Light Installation fitted by The Humber Electrical Eng Co When fitted 1917-7

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Open Type Robey Engine direct coupled to 4 Pole Compound
wound Dynamo by J H Holmes
 Capacity of Dynamo 30 Amperes at 100 Volts, whether continuous or alternating current Direct
 Where is Dynamo fixed Starboard Eng Room Whether single or double wire system is used Double
 Position of Main Switch Board Starboard Eng Room having switches to groups Three of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each One 3 way Tormentor One 10 way
Wheelhouse One 3 way Eng Room One 5 way aft Cabins

If fuses are fitted on main switch board to the cables of main circuit No 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 25% 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 Yes

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases

Total number of lights provided for = 55 - 16 CP arranged in the following groups :-

A	8	lights each of	16	candle power requiring a total current of	4.4	Amperes
B	29	lights each of	16	candle power requiring a total current of	16.	Amperes
C	6	lights each of	16	candle power requiring a total current of	3.3	Amperes
D	12	lights each of	16	candle power requiring a total current of	6.6	Amperes
E		lights each of		candle power requiring a total current of		Amperes
3	Mast head light with	1 lamps each of	32	candle power requiring a total current of	Included in	Amperes
2	Side light with	1 lamps each of	32	candle power requiring a total current of	"	Amperes
2	Cargo lights of	one 6-16cp one 2 candle power, whether incandescent or arc lights				

If arc lights, what protection is provided against fire, sparks, &c.

No Arcs
to wheel house

Where are the switches controlling the masthead and side lights placed

DESCRIPTION OF CABLES.

Main cable carrying	30	Amperes, comprised of	7	wires, each	16	S.W.G. diameter,	.022	square inches total sectional area
Branch cables carrying	5	Amperes, comprised of	3	wires, each	20	S.W.G. diameter,	.003	square inches total sectional area
Branch cables carrying	16	Amperes, comprised of	7	wires, each	20	S.W.G. diameter,	.007	square inches total sectional area
Leads to lamps carrying	7	Amperes, comprised of	3	wires, each	20	S.W.G. diameter,	.003	square inches total sectional area
Cargo light cables carrying	4	Amperes, comprised of	140	wires, each	36	S.W.G. diameter,	.002	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Lead Covered Armoured U.I.R. Twin Cable Lead Covered
ditto single Cable

Joints in cables, how made, insulated, and protected

No joints

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 No

How are the cables led through the ship, and how protected

Clipped up direct to steel work & Decks
when B & A Cable is used



© 2020

U253-01A Register Foundation

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

Lead — Armoured

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat

Lead — Armoured

What special protection has been provided for the cables near boiler casings

Lead — Armoured

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

Lead — Armoured

How are cables carried through beams

Clear Holes

through bulkheads, &c.

By an Gland

How are cables carried through decks

Deck Pipes

Are any cables run through coal bunkers

Yes

or cargo spaces

Yes

or spaces which may be used for carrying cargo, stores, or baggage

Yes

If so, how are they protected

Lead — Armoured

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

Main 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 600 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.

THE HUNTER ELECTRICAL ENGINEERING CO

Electrical Engineers

Date

July 12th 1917

COMPASSES.

Distance between dynamo or electric motors and standard compass

about 4 ft

Distance between dynamo or electric motors and steering compass

4

The nearest cables to the compasses are as follows:—

A cable carrying

2

Amperes

Lead to

feet from standard compass

Lead to

feet from steering compass

A cable carrying

2

Amperes

Lead to

feet from standard compass

Lead to

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

nil

degrees on

any

course in the case of the

standard compass and

nil

degrees on

any

course in the case of the steering compass.

FOR COCHRANE & SONS, LTD.

J. H. Cochrane

Builder's Signature.

Date

16/7/1917

GENERAL REMARKS.

This vessel has been fitted with an electric light installation as above & the workmanship is good, on completion it was tried under full working conditions & found satisfactory

It is submitted that this vessel is eligible for

THE RECORD. Elec. light.

J. H. Cochrane 19/7/17

Frank A. Sturgeon

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

Im. 11.4. Transfer.



© 2020

Lloyd's Register Foundation