

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 13501

Port of Hamburg Date of First Survey 23rd May Date of Last Survey 10th July No. of Visits 10
 No. in on the Iron or Steel SSN. "Kionwa" Port belonging to Hamburg
 Reg. Book Built at Kiel By whom Howaldtswerke When built 1913
 Owners Deutsch-Amerik. Petroleum Ges. Owners' Address Hamburg
 Yard No. 564 Electric Light Installation fitted by The Builders When fitted 1913

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound Steam Engine, made by C. Daewel, Kiel, coupled direct to a Allgemeine Electricitäts Gesellschaft's Dynamo, running about 250 rev. per min.

Capacity of Dynamo 150 Amperes at 110 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed Engine Room Whether single or double wire system is used double

Position of Main Switch Board Engine Room having switches to groups A, B, C, D, & E of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Engine Room with 8 switches, 1 Saloon passage with 16 switches, 1 in passage aft. Hawk, with 10 switches, 1 Messroom with 9 switches, 1 Fore-castle with 6 switches, 1 Chart-house with 5 switches.

If cut outs 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 cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the cut outs of non-oxidizable metal yes and constructed to fuse at an excess of 20 per cent over the normal current

Are all cut outs 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 —

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 192 arranged in the following groups:—

A Eng. Room & St. Space 27 lights each of 25 candle power requiring a total current of 20 Amperes

B Masthead 51 lights each of 25 candle power requiring a total current of 38 Amperes

C Aft 63 lights each of 25 candle power requiring a total current of 47 Amperes

D Forecastle 14 lights each of 25 candle power requiring a total current of 10 Amperes

E Chart-house 5 lights each of 4 & 32 14 25 candle power requiring a total current of 4.5 Amperes

2 Mast head light with 1 lamps each of 32 candle power requiring a total current of — Amperes

2 Side light with 1 lamps each of 32 candle power requiring a total current of — Amperes

incl. in 26. 2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 38. 40. 42. 44. 46. 48. 50. 52. 54. 56. 58. 60. 62. 64. 66. 68. 70. 72. 74. 76. 78. 80. 82. 84. 86. 88. 90. 92. 94. 96. 98. 100. 102. 104. 106. 108. 110. 112. 114. 116. 118. 120. 122. 124. 126. 128. 130. 132. 134. 136. 138. 140. 142. 144. 146. 148. 150. 152. 154. 156. 158. 160. 162. 164. 166. 168. 170. 172. 174. 176. 178. 180. 182. 184. 186. 188. 190. 192. 194. 196. 198. 200. 202. 204. 206. 208. 210. 212. 214. 216. 218. 220. 222. 224. 226. 228. 230. 232. 234. 236. 238. 240. 242. 244. 246. 248. 250. 252. 254. 256. 258. 260. 262. 264. 266. 268. 270. 272. 274. 276. 278. 280. 282. 284. 286. 288. 290. 292. 294. 296. 298. 300. 302. 304. 306. 308. 310. 312. 314. 316. 318. 320. 322. 324. 326. 328. 330. 332. 334. 336. 338. 340. 342. 344. 346. 348. 350. 352. 354. 356. 358. 360. 362. 364. 366. 368. 370. 372. 374. 376. 378. 380. 382. 384. 386. 388. 390. 392. 394. 396. 398. 400. 402. 404. 406. 408. 410. 412. 414. 416. 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3506. 3508. 3510. 3512. 3514. 3516. 3518. 3520. 3522. 3524. 3526. 3528. 3530. 3532. 3534. 3536. 3538. 3540. 3542. 3544. 3546. 3548. 3550. 3552. 3554. 3556. 3558. 3560. 3562. 3564. 3566. 3568. 3570. 3572. 3574. 3576. 3578. 3580. 3582. 3584. 3586. 3588. 3590. 3592. 3594. 3596. 3598. 3600. 3602. 3604. 3606. 3608. 3610. 3612. 3614. 3616. 3618. 3620. 3622. 3624. 3626. 3628. 3630. 3632. 3634. 3636. 3638. 3640. 3642. 3644. 3646. 3648. 3650. 3652. 3654. 3656. 3658. 3660. 366

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 iron bound leads covered cables, protected by iron casings.

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

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

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

How are cables carried through beams hard wood, bushes. through bulkheads, &c. screwed brass bushes

How are cables carried through decks iron galvanized stand pipe 10" high filled with non conducting asphalt.

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

If so, how are they protected —

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

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

Where are the main switches and cut outs for these lights fitted —

If in the spaces, how are they specially protected —

Are any switches or cut outs 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 —

The installation is yes supplied with a voltmeter and yes an amperemeter, fixed main switch board

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas yes

Are any switches, cut outs, or joints of cables fitted in the pump room or companion no

How are the lamps specially protected in places liable to the accumulation of vapour or gas all fittings screwed reproof tight

The copper used is guaranteed to have a conductivity of 98 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 50 Millions Siemens Units megohms per kilometer statute mile after 24 hours' immersion in seawater.

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 Builders are the Electrical Engineers Date —

COMPASSES.

Distance between dynamo or electric motors and standard compass 120 ft.

Distance between dynamo or electric motors and steering compass 110 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>.6</u>	<u>close to</u>	<u>close to</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

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 — course in the case of the standard compass and nil degrees on — course in the case of the steering compass.

HOWALDTSWERKE

K. H. H. H.

Builder's Signature. Date 11th July 1913

GENERAL REMARKS. The Elec. Light installation on board of this Vessel is in my opinion fitted in conformity with the Society's Rules and eligible to be recorded Elec. Light in the Society's Register. Both
It is submitted that this vessel is eligible for
THE RECORD. Elec. light. J. W. D. 24/7/13
TUE. JUL. 22. 1913

Committee's Minute

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

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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