

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 92049

24 NOV 1927

Received at London Office

21 MAR 1928

Date of writing Report 24 NOV 1927 When handed in at Local Office

19

Port of

London

No. in Survey held at Bedford  
Reg. Book.Date, First Survey Jan 14<sup>th</sup> 1927Last Survey 21<sup>st</sup> November 1927

Number of Visits

on the ~~Single~~ ~~Triple~~ Screw vesselM/r DeidoTons } Gross  
Net

Built at

Adrossan

By whom built

Adrossan Drydock

Yard No. 337

When built

1927

Owners

Elder Dempster &amp; Co Ltd

Port belonging to

London

Oil Engines made at

Bedford

By whom made

Messrs. H. H. Allen Sons

Contract No. 6604/1/2

When made

1927

Generators made at

Bedford

By whom made

do

do

Contract No. 6604/1/2

When made

1927

No. of Sets

3

Engine Brake Horse Power

100 each  
300 total

Nom. Horse Power as per Rule

86

Total Capacity of Generators

97

Kilowatts.

OIL ENGINES, &amp;c.—Type of Engines Diesel (Burmester Main) 2 or 4 stroke cycle 4 Single or double acting S.A.

Maximum pressure in cylinders

500 lbs/sq

Diameter of cylinders

300<sup>mm</sup>

Length of stroke

430<sup>mm</sup>

No. of cylinders

Two

No. of cranks

Two

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

360<sup>mm</sup>

Is there a bearing between each crank

yes

Revolutions per minute

300

Flywheel dia.

1600<sup>mm</sup>

Weight

4.3 tons

Means of ignition

Compression

Kind of fuel used

Diesel Oil

Crank Shaft, dia. of journals

as per Rule 166<sup>mm</sup>  
as fitted 180<sup>mm</sup>

Crank pin dia.

180<sup>mm</sup>

Crank Webs

Mid. length breadth 230<sup>mm</sup>  
Mid. length thickness 100<sup>mm</sup>

Thick. parallel to axis

shrunk SOLID FORGED

Flywheel Shaft, diameter

as per Rule 166<sup>mm</sup>  
as fitted 180<sup>mm</sup>

Intermediate Shafts, diameter

as per Rule 166<sup>mm</sup>  
as fitted 180<sup>mm</sup>

Thickness of cylinder liners

27<sup>mm</sup>

Is a governor or other arrangement fitted to prevent racing of the engine when declutched

Yes

Means of lubrication

Forced, geared pumps.

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

Cooling Water Pumps, No.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size

One geared pump driven from each engine.

Air Compressors, No.

Three

No. of stages

Three

Diameters

7/285/318<sup>mm</sup>

Stroke

220<sup>mm</sup>

Driven by

Crank Shaft.

Scavenging Air Pumps, No.

Diameter

Stroke

Driven by

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Fusible plug

Can the internal surfaces of the receivers be examined

Yes

What means are provided for cleaning their inner surfaces

Ends portable

Is there a drain arrangement fitted at the lowest part of each receiver

Yes

High Pressure Air Receivers, No.

Three

Cubic capacity of each

90 litres

Internal diameter

9 3/4"

thickness

3/8"

Seamless, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33<sup>tons</sup>

Working pressure by Rules

102.6 lbs/sq

Starting Air Receivers, No.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

ELECTRIC GENERATORS:—Type

Open

compound wound with Interpoles

Pressure of supply

220

volts.

Load

295

Amperes.

Direct or Alternating Current

Direct

If alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

Yes

Generators, do they comply with the requirements regarding rating

yes

are they compound wound

Yes

are they over compounded 5 per cent.

yes

if not compound wound state distance between each generator

is an adjustable regulating resistance fitted in series with each shunt field

yes

Are all terminals accessible, clearly marked, and furnished with sockets

yes

are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched

yes

Are the lubricating arrangements of the generators as per Rule

yes

PLANS.

Are approved plans forwarded herewith for Shafting

No, retained for Shafting

Receivers

Separate Tanks

SPARE GEAR

As per attached List.

4x/397

The foregoing is a correct description,

for W.H.ALLEN SONS &amp; COMPANY LIMITED

Manufacturer.

A. W. Allen



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Lloyd's Register  
Foundation

005720-005726-005727



Dates of Survey while building { During progress of work in shops- Jan. 14 March 9 June 30 July 14, 27 Aug. 13, 18, 29 Sep. 8, 15, 27 Oct. 3, 11, 31 Nov. 21.  
During erection on board vessel - - -  
Total No. of visits - 14 partial = 4 full.

Dates of Examination of principal parts—Cylinders 14-7-27; 27-7-27 18-8-27, 27-9-27  
29-7-27; 8-9-27 Covers 21-11-27 Pistons 3-10-27 Piston rods ✓

Connecting rods 14-1-27; 9-3-27. Crank and Flywheel shaft 14-7-27; 3-10-27. Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark See below Intermediate shaft, Material See below Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel "British Eclair"

General Remarks (State quality of workmanship, opinions as to class, &c.)

### CRANK SHAFTS IDENTIFICATION MARKS.

ENG. A.		ENG. B.		ENG. C.	
9C13	X81	9C13	X81	TEST 620	
1192	59	1193	60	LLOYDS 7682	
LLOYDS	MSTC	LLOYDS	MSTC	4-3-27	
29-4-27		20-5-27		J.P.	
				14-7-27	
				LR	

This machinery has been constructed under Special Survey in accordance with approved plans and Rule requirements. The workmanship and materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey. The three sets which are numbered K61601/A/B/C have been despatched to Glasgow where they are to be installed and in my opinion, will be eligible for inclusion in the Classification and record of + M.C. of the vessel.

The amount of Fee ... £ 8-12-0

Travelling Expenses (if any) £ 6-16-3

When applied for,  
24 NOV 1927

When received,  
19

Arthur D. Chalmers.  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 20 MAR 1928

Assigned See Accompanying Machy Report



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