

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

13 OCT 1930

No. 50737

20 AUG 1930

pt. 4c.

Date of writing Report

When handed in at Local Office

15. 8. 1930 Port of

Received at London Office

No. in Survey held at

Reg. Book.

Single
Twin
Triple
Quadruple

Screw vessel

TWEEDBANK
Missio Workman blackie M.O. No. 513.

Date, First Survey

26. 7. 29

Last Survey

11. 7. 1930

Number of Visits

29

Tons { Gross
Net

Built at

By whom built

Yard No.

When built

Owners

Port belonging to

Oil Engines made at

By whom made

Contract No.

When made

Generators made at

Glasgow

By whom made

Lat Britant Auxiliaire

Contract No.

1363

When made

1930

No. of Sets

2

Engine Brake Horse Power

200

Nom. Horse Power as per Rule

52

Total Capacity of Generators

135

Kilowatts. *each*

OIL ENGINES, &c.

Type of Engines

British Lat Diesel

2 or 4 stroke cycle

2

Single or double acting

Single

Maximum pressure in cylinders

500

Diameter of cylinders

256 1/2

Length of stroke

450 1/2

No. of cylinders

3

No. of cranks

3

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

334 1/2

Is there a bearing between each crank

yes

Revolutions per minute

310

Flywheel dia.

1800 1/2

Weight

2.5 tons

Means of ignition

Compression

Kind of fuel used

Diesel oil

Crank Shaft, dia. of journals

as per Rule 148.5 1/2

Crank pin dia.

160 1/2

Crank Webs

Mid. length breadth 212 1/2

Thickness parallel to axis

as per Rule 160

Thickness around eye hole

Flywheel Shaft, diameter

as per Rule 160

Intermediate Shafts, diameter

as per Rule 160

Thickness of cylinder liners

15 1/2

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

yes

Means of lubrication

Mechanical

Are the cylinders fitted with safety valves

yes

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

Lagged

Cooling Water Pumps, No.

one each engine

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

Lubricating Oil Pumps, No. and size

one each engine. gas wheel type 50x40 suction & discharge

Air Compressors, No.

one each engine

No. of stages

3

Diameters

260, 232, 56

Stroke

335

Driven by *frankthorp*

Scavenging Air Pumps, No.

one each engine

Diameter

370

Stroke

410

Driven by *frankthorp*

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

yes

Can the internal surfaces of the receivers be examined

yes

What means are provided for cleaning their inner surfaces

burned cones

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

yes

High Pressure Air Receivers, No.

one each engine

Cubic capacity of each

1.44

Internal diameter

210

thickness

11

Seamless, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

31-35 tons

Working pressure by Rules

1533

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

Pressure of supply

220

volts.

Load

1614

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

yes

Receivers

1-6-29

Separate Tanks

yes

APPROPRIATE GEAR 2 main bearing studs, 1 cyl. conn, 1 set of engine bolts & nuts, 2 gudgeon pins, 1 1/2 sets engine piston rings

set of fuel pump working parts, 3 fuel valve spindles, 1 relief valve, 1 air starting valve, 1 set compression piston rings

set cyl. conn studs, 1/2 compression section & delivery valves, 2 fuel valves complete, 4. main piston complete.

1/2 compression lines, 1 set of MP & LP compression piston rings & 2 sets of HP rings, 3 fuel valve frame plates, 3 sets of fuel

return valves, 5 each LP compression section & delivery valves, 2 each MP section & delivery valves, 2 each

HP section & delivery valves, HP intercooler tube stacks.

The foregoing is a correct description,

FIAT BRITISH AUXILIARIES LIMITED,

John Rogers

Manufacturer.

August 11th 1930

WORKS MANAGER.



© 2020

Lloyd's Register Foundation

003181-003190-0295

Dates of Survey while building
 During progress of work in shops - 1929 July 26 Aug 2 12 20 Sep 5 11 13 16 19 Oct 2 8 11 14 Nov 13 Dec 17 (1930) Jan 31 Feb 11
 During erection on board vessel - Apr 15 28 May 1 13 19 30 June 6 16 24 30 July 11
 Total No. of visits - 29 -

Dates of Examination of principal parts - Cylinders 16-6-30. Covers 16-6-30 Pistons 24-6-30 Piston rods -

Connecting rods 24-6-30. Crank and Flywheel shaft 6-2-30 Intermediate shaft -

Crank and Flywheel shaft, Material 5th best steel Identification Mark 1646- 6-2-30 Intermediate shafts, Material - Identification Marks -

Is this machinery duplicate of a previous case *yes*. If so, state name of vessel *Wickman bloater 570. 511-512*

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

The Engines have been built under special Survey and as approved. The materials and workmanship are good. On completion they have been tested on the bench with satisfactory results.

The Engines are, in my opinion, eligible for inclusion in the classification and notation of L.R.C. of the vessel in which they are intended.

The Engines have been despatched to Belfast.

These engines have been efficiently installed in the vessel and tried out under working conditions with satisfactory results.

John K. Williams.

Belfast.

A.B.
15/8/30.

The amount of Fee ... £ 10 : 8 :

Travelling Expenses (if any) £ :

When applied for,

18 AUG 1930

When received,

11-10-30

Surveyor to Lloyd's Register of Shipping.

FRI. 17 OCT 1930

Committee's Minute GLASGOW 19 AUG 1930

Assigned Deferred *RM*



© 2020

Lloyd's Register Foundation