

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 7272

Date of writing Report

19

When handed in at Local Office

19

Port of

Philadelphia

No. in Survey held at

Grove City Pa & Chester Pa.

Date, First Survey

Dec 1st 1936

Last Survey

April 1st 1937

Reg. Book.

Single

Motor

on the

Twin

Triple

Quadruple

Screw vessel

TEXAS. SUN.

Tons

Gross

Net

Built at

Chester Pa

By whom built

Sam Shipley & Co

Yard No.

159

When built

1937.

Owners

Sam Gil Co

Port belonging to

Philadelphia

Oil Engines made at

Grove City Pa

By whom made

Cooper Bessemer Corp

Engine Contract No.

1135

When made

1936-7

Generators made at

Schenectady N.Y.

By whom made

General Electric Co

Gen Contract No.

1720382

When made

"

No. of Sets

3

Engine Brake Horse Power

150

Nom. Horse Power as per Rule

Total Capacity of Generators

300

Kilowatts.

OIL ENGINES, &c.—Type of Engines

Cooper Bessemer Diesel GND-4 2 or 4 stroke cycle

4

Single or double acting

Single

Maximum pressure in cylinders

700 lbs

Diameter of cylinders

10 1/2"

Length of stroke

13 1/2"

No. of cylinders

4

No. of cranks

4

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

12 3/4"

Is there a bearing between each crank

Yes

Revolutions per minute

325

Flywheel dia.

42"

Weight

1292 lbs

Means of ignition

Solid

Kind of fuel used

Diesel

Crank Shaft, dia. of journals

as per Rule

7 1/2"

Crank pin dia.

7 1/2"

Crank Webs

Mid. length breadth

12 1/8"

Thicknes parallel to axis

shrunk

Mid. length thickness

3 1/4"

Thicknes around eyehole

Flywheel Shaft, diameter

as per Rule

7"

Intermediate Shafts, diameter

as per Rule

6 3/4"

Thicknes of cylinder liners

7/8" & 7/16"

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

Yes

Means of lubrication

Forced

Are the cylinders fitted with safety valves

Yes

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

Yes

Cooling Water Pumps, No.

3 5/16" x 3 1/2" D.A.

Capacity

47 G.P.M.

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

Yes

Lubricating Oil Pumps, No. and size

3" x 3 1/2" S.A.

Capacity

20 G.P.M.

Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

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

Can the internal surfaces of the receivers be examined

What means are provided for cleaning their inner surfaces

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

High Pressure Air Receivers, No.

Cubic capacity of each

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

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

MPC-6 Form A. 100 KW continuous

40°C.

Pressure of supply

240

volts.

Load

417

Amperes.

Direct or Alternating Current

Direct.

If alternating current system, state frequency of periods per second

Yes

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

(If not, state date of approval)

Receivers

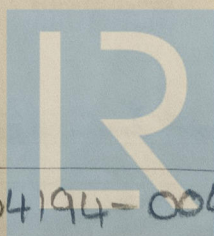
Separate Tanks

SPARE GEAR

To rule requirements plus one set of flywheel studs & dowels for coupling, and one set of parts for water pump for each engine.

The foregoing is a correct description,

Manufacturer.



© 2020

Lloyd's Register Foundation

004194-004199-0102

Dates of Survey while building { During progress of work in shops - - During erection on board vessel - - - Total No. of visits

Dec 1st 29th 1936. Jan 16. Feb 15th 16th 17th & 18th 1937.
March 25th April 1st 1937.
9

Dates of Examination of principal parts—Cylinders Dec 1st 29th 1936 Covers Dec 1st 29th 1936 Pistons Dec 1st 29th 1936 Piston rods

Connecting rods Dec 1st 29th 1936 Crank and Flywheel shaft Dec 1st 29th 1936

Crank and Flywheel shafts, Material O.H. Steel Identification Mark Lloyd's 2946. 2945. 2945 WJF. 8-12-36 8-25-36. 8-12-36

Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) The above mentioned engines (three engines) have been built under Special Survey, and on completion were tested, coupled to generators under full and intermediate loads in the shop. The materials and workmanship were found to be sound and efficient, and the electrical load tests satisfactory.

Attached hereto is copy of crank shaft drawing and crank shaft forging certificate No 2945. 2946. 2945.

For identification purposes the generator sets were numbered as follows:-

Engine No	1135	1136	1137
Cope/ Bessemer "MO" No.	1176	1255	1291
Generator No	1720382	1720381	1720383
Lloyd's crank shaft No	WJF 2946 8-12-36.	WJF 2945 8-25-36.	WJF 2945 8-12-36.

The above mentioned engines have been satisfactorily fitted on board the vessel, tried out under full power with satisfactory results.

Rpt. 4c.
Date of writing
No. in Reg. Book.
Built at
Owners
Oil Engine
Generator
No. of Strokes
OIL ENGINE
Maximum
Span of beam
Revolutions per minute
Crank shaft
Flywheel
Is a governor
Are the cylinders
Cooling water
Lubrication
Air Compressor
Scavenging
AIR REFRIGERATION
Can the inlet
Is there a
High Pressure
Seamless, light
Starting
Seamless, light
ELECTRICITY
Pressure
If alternator
Has the A
Generator
are they over
is an adjust
are they so
PLANS.
SPARE
one s

The amount of Fee ... £
Travelling Expenses (if any) £
When applied for, 19
When received, 19

WATCunham
Surveyor to Lloyd's Register of Shipping.

NEW YORK APR 28-1937

Committee's Minute

Assigned See First Entry Rpt. on Oil Eng.