

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 20299

OCT -6 1937 JUN -7 1938

Date of writing Report 5.10.37 When handed in at Local Office 5.10.37 Port of Trinidad
No. in Survey held at Reg. Book. Lincoln Date, First Survey 30.11.1936 Last Survey 30.9.1937
Number of Visits 11

Single on the Twin Triple Quadruple } Screw vessel M. T. "Opalia" Tons { Gross 6195 Net 3596
Built at Amsterdam By whom built Nederlandsche Stoomvaart Maatschappij Yard No. 604 When built 1937
Owners Anglo-Saxon Petroleum Co. Port belonging to
Oil Engines made at Lincoln By whom made Auston & Hornsby, Ltd ENG. Contract No. 182786 When made 1937
Generators made at By whom made Contract No. When made
No. of Sets 1 Engine Brake Horse Power 60 Nom. Horse Power as per Rule 18.6 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines 3 VCRZ, Airless Injection Solid Starting 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 400 Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 3 No. of cranks 3
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/8" Is there a bearing between each crank Yes
Revolutions per minute 450 Flywheel dia. 3'-4" Weight 19 cwt. Means of ignition Compression Kind of fuel used Heavy Oil
Crank Shaft, dia. of journals as per Rule Approved as fitted 6" Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis shrink
Flywheel Shaft, diameter as per Rule Approved as fitted 6" Intermediate Shafts, diameter as per Rule Approved as fitted 6" Thickness of cylinder liners 3/4"
Is a governor or other arrangement fitted to prevent racing of the engine when declutched 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 Water
Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Lubricating Oil Pumps, No. and size One, geared
Air Compressors, No. No. of stages Diameters Stroke Driven by
Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate
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
Pressure of supply volts. Full Load Current Amperes. Direct or Alternating Current
If alternating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off
Generators, are they compounded as per rule is an adjustable regulating resistance fitted in series with each shunt field
Are all terminals accessible, clearly marked, and furnished with sockets
Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule
If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test and do the results comply with the requirements
If the generators are 100 kw. or over have they been built and tested under survey

PLANS. Are approved plans forwarded herewith for Shafting 11-11-32 Receivers Separate Tanks
(If not, state date of approval)

SPARE GEAR As per Rule requirements.

Auston & Hornsby, Limited,
The foregoing is a correct description,
J. Loysh 30/9/37
Oil & Gas Engines Dept. Manufacturer.

Dates of Survey while building: During progress of work in shops - 1936 Nov 30, Dec 14, 1937 Jan 18, 21, Feb 1, May 3, Jun 24, Jul 1, Aug 24, Sep 23, 30
 During erection on board vessel -
 Total No. of visits 11

Dates of Examination of principal parts - Cylinders 23-9-37 Covers 23-9-37 Pistons 23-9-37 Piston rods ✓
 Connecting rods 18-1-37 Crank and Flywheel shafts 23-9-37 Intermediate shafts ✓
 Crank and Flywheel shafts, Material Steel Identification Marks 3251E-23-9-37 AS
 Intermediate shafts, Material ✓ Identification Marks ✓
 Identification marks on Air Receivers ✓

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

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

This engine has been built under special survey in accordance with the Rules and approved plans.
 The materials and workmanship are good.
 Running tests have been carried out at the Maker's works with satisfactory results.
 The engine has been despatched to Amsterdam to the order of Nederlandsche Stoom Maatschappij.
 Engine fitted satisfactorily and tried under full loaded condition and found in order.

M. M. M. M.

Im. 537. - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minutes.)

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

C. Quaker for C. H. A. Pidditch, L. Bell, D. L. H. Hollinson & Sel
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute

FRI. 24 JUN 1938

Assigned

Edl Amst. 76. 15288



Rpt. 13.

Date of writing
 No. in Reg. Book.

Built at
 Owners
 Electric L
 Is the Vessel

System of
 Pressure of
 Direct or A
 If alternating
 Has the Auto
 Generators,
 are they over

Where more to
 series with each
 approved
 Have certificate
 Are all termin
 short circuited.

Position of
 in way of the
 woodwork or ol
 are the generato

Earthing, are
 in metallic con
 a fuse on each
 Switchboard
 injury and dam
 horizontally fro
 materials

is it of an appro
 non-hygroscopic
 type Yes
 Yes
 omnibus bars
 "off" position
 switches

Are turbine driv
 fire-resisting mat
 voltmeters

Two
 do these comply u