

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

114523

No. 11536

date of writing Report 17.6.43 When handed in at Local Office 5.7. 43 Port of MANCHESTER.
No. in Survey held at ASHTON-UNDER-LYNE. Date, First Survey 15.1.43 Last Survey 26.5.1943.
Reg. Book. Number of Visits Four.
on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel "EMPIRE CHIEFTAIN" Tons { Gross 9904 Net 8904
Built at Haverton Hill on Tees By whom built Furness Shipbuilding Co. Yard No. 354 When built 1943
Owners Ministry of War Transport. Port belonging to Middlesbrough.
Oil Engines made at Ashton-u-Lyne. By whom made National Gas & O.E. Co. Ltd. Engine No. 56343 When made 1943.
Air Compressor ~~made at~~ Ipswich. By whom made Reavell & Co. Ltd. Compressor No. 78979. When made 1942.
No. of Sets One Engine Brake Horse Power 5 Nom. Horse Power as per Rule 1.4 Total Capacity of Generators - Kilowatts.

OIL ENGINES, &c.—Type of Engines "B.S.S." 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 725 lbs. Diameter of cylinders 3 3/4" Length of stroke 5 1/2" No. of cylinders 1 No. of cranks 1
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4 7/8" Is there a bearing between each crank -
Revolutions per minute 800 Flywheel dia. 22 1/2" Weight 235 lbs. Means of ignition Compression Kind of fuel used Diesel Oil.
Crank Shaft, dia. of journals as per Rule Approved. 2" Crank pin dia. 2 1/8" Crank Webs Mid. length breadth 3 1/4" Thickness parallel to axis -
as fitted 2" Mid. length thickness 1 1/8" shrunk Thickness around eye-hole Solid.
Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 3/8"
as fitted Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Splash.
Are the cylinders fitted with safety valves No. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -
Cooling Water Pumps, No. 1 Centrifugal Type Is the sea suction provided with an efficient strainer which can be cleared within the vessel -
Lubricating Oil Pumps, No. and size -
Air Compressors, No. One No. of stages Two Reavell Diameters No. 78979. Stroke - Driven by Direct.
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 8.1.42. Receivers Separate Tanks
(If not, state date of approval)

SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description.

THE NATIONAL GAS AND OIL ENGINE Co. Ltd.

Manufacturer.

A. J. Council



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Lloyd's Register
Foundation

REPORT ON OIL ENGINE
 Dates of Survey while building { During progress of work in shops - 15.1.43., 12.2.43., 25.3.43.
 During erection on board vessel - - -
 Total No. of visits Three.

Dates of Examination of principal parts—Cylinders 15.1.43. Covers 15.1.43. Pistons 15.1.43. Piston rods 15.1.43.

Connecting rods 12.2.43. Crank and Flywheel shafts 25.3.43. Intermediate shafts

Crank and Flywheel shafts, Material 0. H. Steel. Identification Marks LLOYD'S 1503 PH. 25.3.43.

Intermediate shafts, Material Identification Marks

Identification marks on Air Receivers

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, etc. THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL

SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND

RULE REQUIREMENTS. THE WORKMANSHIP AND MATERIALS ARE GOOD AND THE ENGINE, WHEN TESTED IN SHOP

UNDER FULL LOAD CONDITIONS, GAVE SATISFACTORY RESULTS. IN MY OPINION, THIS ENGINE IS SUITABLE TO BE

PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY FOR THE PURPOSE INTENDED.

*This engine has now been securely fitted on board & has run under working conditions
 & found satisfactory.*

Air Compressor No. and size

Revolving Air Pumps No. and size

Air Receivers:—How they have been tested under Survey

Each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the receiver surface of the receiver be examined

Is there a drain arrangement fitted at the base of each receiver

High Pressure Air Receiver

Receiver, top welded or riveted longitudinal joint

Storing Air Receiver, No.

Receiver, top welded or riveted longitudinal joint

Electric Generators:—Type

Pressure of supply

Is alternating current system, state the frequency

Generators are they constructed as per Rule

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

Are they so placed or shielded that they cannot be accidentally earthed, short circuited, or touched

Is the generator or motor 100 kva. or over have they been built and tested under survey

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The amount of Fee ... £ 4 : 4 : - When applied for, 5.7.49 43 0.95.
 Travelling Expenses (if any) £ : 10 : - When received, 19

A. E. Smith & L. H. Smith
 Surveyor to Lloyd's Register of Shipping.

FRI. 17 DEC 1943

Committee's Minute

Assigned

See f.c. rpl. Mail 17523

LR-FAE-TB15-47



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