

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10,158

Date of writing Report 11th Aug. 1940 When handed in at Local Office 19th Aug. 1940 Port of MANCHESTER
No. in Survey held at ASHTON-U. LYNE Date, First Survey 1st July 1940 Last Survey 11th Aug. 1940.
Reg. Book. Number of Visits 3.

Single
on the Twin } Screw vessel
Triple
Quadruple

Tons { Gross
Net

Built at By whom built Yard No. When built

Owners INDO-CHINA STEAM NAVIGATION CO. Port belonging to

Oil Engines made at ASHTON-U. LYNE By whom made NATIONAL GAS & OIL ENG. CO. ENGINE Contract No. 53163. When made 1940

Generators made at BRADFORD. By whom made ENGLISH ELECTRIC CO. GENERATOR Contract No. 5K4947. When made 1940.

No. of Sets ONE. Engine Brake Horse Power 37. Nom. Horse Power as per Rule 10.5 Total Capacity of Generators 17.5 Kilowatts.

OIL ENGINES, &c. Type of Engines VERTICAL SOLID INJECTION 2 or 4 stroke cycle 4. Single or double acting SINGLE.

Maximum pressure in cylinders 750 LBS/SQ IN Diameter of cylinders 4 1/2" Length of stroke 6" No. of cylinders 4 No. of cranks 4.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4 25/32" Is there a bearing between each crank YES

Revolutions per minute 1000. Flywheel dia. 25" Weight 337 LBS Means of ignition COMPRESSION Kind of fuel used HEAVY OIL.

Crank Shaft, dia. of journals as per Rule APPROVED. 23/8" Crank pin dia. 2 3/8" Mid. length breadth 3 1/4" Thickness parallel to axis SOLID.
as fitted Mid. length thickness 1 5/16" shrunk Thickness around eye hole 3/8"

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 FORCED.

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

Lubricating Oil Pumps, No. and size ONE. GEAR TYPE APPROX. 65 GALLS PER HOUR

Air Compressors, No. ONE No. of stages 2. Diameters 13/4" & 4" Stroke 3" Driven by AXT ENGINE

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 220 volts. Full Load Current 79.5 Amperes. Direct or Alternating Current DIRECT

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 YES

Generators, are they compounded as per rule YES 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 YES.

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test Not Received 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 YES Receivers - Separate Tanks YES
(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. K. Goull



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Foundation

005656-005670-0247

4.C
N^o 10158

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

1940. July. 1. 4. Aug 11.

3.

Dates of Examination of principal parts—Cylinders 1.7.40 Covers 4.7.40 Pistons 1.7.40 Piston rods —
Connecting rods 1.7.40 Crank and Flywheel shafts 1.7.40 Intermediate shafts —
Crank and Flywheel shafts, Material O.H. INgot STEEL Identification Marks LLOYDS 120. WTH. 31.5.40
Intermediate shafts, Material — Identification Marks —
Identification marks on Air Receivers —

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

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

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 MATERIALS AND WORKMANSHIP ARE OF A GOOD QUALITY AND THE ENGINE WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHOWN SATISFACTORY RESULTS. IN MY OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL, CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED.

Im. 11.37.—Transfer. (MADE IN ENGLAND.)
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 5 : 5 : 0
Travelling Expenses (if any) £ : 5 : 0
When applied for, 17.8.1940
When received, 19

Committee's Minute

Assigned

FRI. 12 SEP 1941

See Hkg JE 8793

P. Leicester
Surveyor to Lloyd's Register of Shipping.



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