

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 112872

pt. 4c.

Date of writing Report 6-6-1945 When handed in at Local Office 12 JUN 1945 Port of *Sp Suich*

No. in Survey held at *Colchester* Date, First Survey *and* Last Survey 4-5-1945

on the *Empire Fitzroy* Single Screw vessel Tons Gross 890 Net 379

Built at *Glasgow* By whom built *Messrs. A.J. Inglis Ltd.* Yard No. *1301* When built *1945*

Owners *Mow & Co. (British Tankers Ltd)* Port belonging to *Glasgow*

Oil Engines made at *Colchester* By whom made *Davey, Paxman & Co. Ltd.* Contract No. *4814* When made *1945*

Generators made at *Chelmsford* By whom made *Crompton Parkinson Ltd.* Contract No. *F.12/A.1395* When made *1945*

No. of Sets *One* Engine Brake Horse Power *48* Nom. Horse Power as per Rule *10.8 (13.7)* Total Capacity of Generators *20* Kilowatts.

TYPE OF ENGINES, &c. Type of Engines *Heavy Oil (4 R.O. Lys.)* 2 or 4 stroke cycle *4*. Single or double acting *Single*

Maximum pressure in cylinders *750 lbs.* Diameter of cylinders *4 5/8"* Length of stroke *5 7/8"* No. of cylinders *4* No. of cranks *4*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *5 7/8"* Is there a bearing between each crank *Yes*

Revolutions per minute *1100* Flywheel dia. *28"* Weight *495 lbs.* Means of ignition *Compression* Kind of fuel used *Sevial*

Crank Shaft, dia. of journals *3 3/8"* Crank pin dia. *2 7/8"* Crank Webs Mid. length breadth *4 1/2"* Thickness parallel to axis *shrink*

Flywheel Shaft, diameter *3 3/8"* Intermediate Shafts, diameter *as per Rule* Thickness of cylinder liners *1/8"*

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 *Yes*

Cooling Water Pumps, No. *One* Is the sea suction provided with an efficient strainer which can be cleared within the vessel *Yes*

Lubricating Oil Pumps, No. and size *One fractional*

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 *Yes* State No. of Report or Certificate

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

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

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness

ELECTRIC GENERATORS: Type *Enclosed unexcited*

Pressure of supply *110* volts. Full Load Current *227* Amperes. Direct or Alternating Current *Direct*

If alternating current system, state the periodicity *Yes* Has the Automatic Governor been tested and found as per rule when full 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 *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*

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test *Yes* and do the results comply with the requirements *Yes*

If the generators are 100 kw. or over have they been built and tested under survey *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *10-6-44* Receivers *Yes* Separate Tanks *Yes*

SPARE GEAR

The foregoing is a correct description, For and on behalf of

DAVEY, PAXMAN & Co. Limited

Manufacturer.

*B. A. Cammell*  
SALES MANAGER



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Dates of Survey while building { During progress of work in shops - - 1945. June 4  
 During erection on board vessel - - -  
 Total No. of visits 042

Dates of Examination of principal parts—Cylinders 11-5-45 Covers 12-5-45 Pistons Piston rods

Connecting rods Crank and Flywheel shafts Intermediate shafts

Crank and Flywheel shafts, Material *Steel* Identification Marks *Nº 729 A.S.*

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 *A.V. Enflin 7-285.*

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

The Engine has been constructed under Special Survey in accordance with the approved plans, Rule requirements & Secretary's letters.  
 The materials & workmanship are of good description.  
 The Engine has been examined under full load conditions for a period of four hours.

Note. This type of engine has been approved in respect to requirements of Notice 1803 & set  
 See Lon. endorsement 31.8.45 attached to London file.

The amount of Fee ... £ 5 : 5 0 When applied for, 12 JUN 1945  
 Travelling Expenses (if any) £ : 10 : 6 When received, 19

*Keywell*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 23 OCT 1945**  
 Assigned **E ACCOMPANYING MACHINERY REPORT.**



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