

Rpt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 137

Received at London Office

LEEDS

Date of writing Report 28-11-1945 When handed in at Local Office 31-12-1945 Port of **LEEDS**

No. in Survey held at **Keighley** Date, First Survey 23-2-45 Last Survey 8-10-1945

Reg. Book. **Single** on the ~~XXXX~~ Screw vessel **"T.R.V. 7"** Tons <sup>Gross</sup> ~~XXXX~~ <sub>Net</sub> ~~XXXX~~

Number of Visits 4

Built at **Gainsborough** By whom built **J.S. Watson (Gainsborough)** Yard No. 1550 When built 1945

Owners **Engine** Port belonging to **Generator**

Oil Engines made at **Keighley** By whom made **H. Widdop & Co. Ltd.** ~~XXXX~~ No. 4504 When made 1945

Generators made at **Belfast** By whom made **Hugh J. Scott** ~~XXXX~~ No. 62181 When made 1945

No. of Sets 1 Engine Brake Horse Power 40/45 Nom. Horse Power as per Rule 3.5-11 Total Capacity of Generators 15 Kilowatts.

**OIL ENGINES, &c.**—Type of Engines **Airless injection, heavy oil** 2 or 4 stroke cycle 4 Single or double acting **single**

Maximum pressure in cylinders **700 lbs/sq. in.** Diameter of cylinders **5 1/4"** Length of stroke **6 1/4"** No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **6 1/2"** Is there a bearing between each crank **Yes**

Revolutions per minute **1000** Flywheel dia. **25"** Weight **3.7 cwt.** Means of ignition **Compression** Kind of fuel used **heavy oil**

Crank Shaft, dia. of journals **3"** as per Rule **3 1/4"** as fitted Crank pin dia. **3 1/4"** Crank Webs **12"** Mid. length breadth **4 1/4"** Thickness parallel to axis **shrunk** Mid. length thickness **1 1/8"** Thickness round eyehole **shrunk**

Flywheel Shaft, diameter **3"** as per Rule **3 1/4"** as fitted **Mounted on crankshaft coupling** Intermediate Shafts, diameter **as per Rule** Thickness of cylinder liners **5/16"**

Is a governor or other arrangement fitted to prevent racing of the engine when declutched **Yes** Means of lubrication **forced**

**Air Servo Motor fitted for starting** Are the cylinders fitted with safety valves **No** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **at 500 R.P.M.**

Cooling Water Pumps, No. **1-1 1/2" bore x 2" stroke** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **at 500 R.P.M.**

Lubricating Oil Pumps, No. and size **1. Double acting 1 1/2" bore x 3" stroke at 500 R.P.M.**

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 **Compound Wound**

Pressure of supply **220** volts. Full Load Current **68** Amperes. Direct or Alternating Current **Direct**

If alternating current system, state the periodicity **-** 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 **-**

PLANS.—Are approved plans forwarded herewith for Shafting **9-12-43** Receivers **-** Separate Tanks **-**

SPARE GEAR **In accordance with the requirements of the Rules.**

**NOTE:** In addition to the above generator this engine drives, through clutches, a stand-by double acting lubricating oil pump 1 1/2" bore by 3" stroke and a Hamworthy centrifugal general service pump (No. 65052) having a capacity of 32 tons per hour.

The foregoing is a correct description,

**H. WIDDOP & COMPANY LTD.**

**H. Widdop**

Manufacturer.



© 2020

Lloyd's Register

007139 007149 0084



Dates of Survey while building { During progress of work in shops - - 23-2-45 28-8-45 5-9-45 8-10-45  
During erection on board vessel - - -  
Total No. of visits.....

Dates of Examination of principal parts—Cylinders 23-2-45 Covers 23-2-45 Pistons 23-2-45 Piston rods -

Connecting rods 23-2-45 Crank and Flywheel shafts 28-6-44 Intermediate shafts -

Crank shaft { Material O.H. Steel Tensile strength 32.4 Tons/sq.in.  
Elongation 34.0 % on 2" Identification Marks LLOYDS J.N.B. 639 28-6-44

Flywheel shaft, Material Identification Marks

Is this machinery duplicate of a previous case Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes ☒ If so, state name of vessel Watsons Yard No. 1549. "T.R.V. 6." /

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This engine has been constructed under Special Survey, of tested materials, in accordance with the Secretary's letters, approved plans and the requirements of the Rules.

The materials and workmanship are good and the engine was found to be satisfactory when tested in the shop under full load conditions with Generator.

This engine is suitable, in my opinion, for fitting on board a vessel classed with the Society.

- Fitted onboard in accordance with the Rules and Specification and found under working condition  
- G.W. Lang  
Hull 15/3/46

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

Committee's Minute  
Assigned See F.E. Machy. rpt.

FRI. 29 MAR 1946

D. Whalton  
Surveyor to Lloyd's Register of Shipping.

