

Portable Pumps for Levee Dredging

SALVAGE PUMP

Enforcer Complete then no 2

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11877.

Received at London Office 13 DEC 1944

of writing Report 28/6/44 in When handed in at Local Office 1/7/44 in Port of MANCHESTER.

in Survey held at ALTRINCHAM. Date, First Survey 2/5/44 Last Survey 28/6/44 19  
Number of Visits 7

on the <sup>Single</sup> ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel <sup>5/5</sup> "Enforcer". Tons <sup>Gross</sup> ~~Net~~

at HULL. By whom built C.D. Holmes & Co. Yard No. J.2533/5/7. When built

Engines made at ALTRINCHAM. By whom made Russell Newbery & Co. Engine 3851 ~~XXXXXX~~ No.s. 3852 ~~XXXXXX~~ When made 1944.  
Contract No. 3853 ~~XXXXXX~~ 3854. When made

of Sets 4 Engine Brake Horse Power 14 Nom. Horse Power as per Rule 4 Total Capacity of Generators - Kilowatts.

ENGINES, &c.—Type of Engines Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single.  
Minimum pressure in cylinders 860 lbs/sq" Diameter of cylinders 4 1/2" 4 1/8" Length of stroke 6" No. of cylinders 2 No. of cranks 2  
of bearings, adjacent to the Crank, measured from inner edge to inner edge 5 1/8" Is there a bearing between each crank Yes.

Revolutions per minute 800. Flywheel dia. 22" Weight 220 lbs. Means of ignition Compression Kind of fuel used Diesel Oil.  
Crank Shaft, dia. of journals as per Rule Approved. 2 1/2" Crank pin dia. 2 3/8" Mid. length breadth 3 1/2" Thickness parallel to axis -  
as fitted 2 1/2" Crank Webs Mid. length thickness 1.5/16" Thickness around eye-hole -

Wheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule - Thickness of cylinder liners 11/32"  
governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced.

the cylinders fitted with safety valves No. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -  
Driving Water Pumps, No. One - Centrifugal. 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.  
Compressors, No. No. of stages Diameters Stroke Driven by

Manufacturing Air Pumps, No. Diameter Stroke Driven by

RECEIVERS:—Have they been made under Survey State No. of Report or Certificate  
each receiver, which can be isolated, fitted with a safety valve as per Rule  
the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness  
Material Range of tensile strength Working pressure by Rules

Working Air Receivers, No. Total cubic capacity Internal diameter thickness  
Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type  
Pressure of supply volts. Full Load Current Amperes. Direct or Alternating Current

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  
Generators, are they compounded as per rule is an adjustable regulating resistance fitted in series with each

at field Are all terminals accessible, clearly marked, and furnished with sockets  
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

the generators are under 100 kw. full load rating, have the Makers supplied certificates of test and do the results comply with the requirements  
the generators are 100 kw. or over have they been built and tested under survey

PLANS. Are approved plans forwarded herewith for Shafting 2.10.42. Receivers Separate Tanks  
(If not, state date of approval)

PRE GEAR STANDARD SPARES ONLY.

N<sup>o</sup>. 3851 put onboard 'ENTICER'  
" 3852 sent to Naval Base Plymouth  
" 3853 fitted on board 'ENIGMA'  
" 3854 sent to Naval Base, Portsmouth

W. Shields, Hull.

The foregoing is a correct description,  
per pro. RUSSELL, NEWBERY & Co. Ltd.  
G. Waterworth, Secretary.



Dates of Survey while building { During progress of work in shops - - 1944 May 2nd, 3rd, 26th. June 12th, 14th, 22nd & 28th.  
 { During erection on board vessel - - -  
 { Total No. of visits

Dates of Examination of principal parts—Cylinders 2 & 3/5/44 Covers 2&3/5/44 222/6/44 Pistons 2 & 3/5/44 Piston rods -  
 Connecting rods 2 & 3/5/44. Crank and Flywheel shafts 2 & 3/5/44. Intermediate shafts  
 Crank and Flywheel shafts, Material O. H. STEEL Identification Marks SEE BELOW.  
 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 See Manchester Report No. 11,753.

General Remarks (State quality of workmanship, opinions as to class, &c. THESE ENGINES HAVE BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND ARE IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINES, WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHEWED SATISFACTORY RESULTS. IN MY OPINION, THESE ENGINES ARE SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED.

	<u>ENGINE 3851</u>	<u>ENGINE 3852</u>	<u>ENGINE 3853</u>	<u>ENGINE 3854</u>
CRANKSHAFT	LLOYD'S 2156	LLOYD'S 2082	LLOYD'S 2046	LLOYD'S 2156
	F.H. 1.11.43	F.H. 31.1.44	F.H. 31.1.44	F.H. 1.11.43

Im 4.34.—Transfer. (MADE AND PRINTED IN ENGLAND)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 16 : 16 : 30/6/44  
 Travelling Expenses (if any) £ 1 : 10 :  
 When applied for, 30/6/44  
 When received, 19.....

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

Committee's Minute FRI. 12 JAN 1945  
 Assigned See F.E. machy. opt.

