

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2083.

Received at London Office

MAR 28 1938

pt. 4c.

Date of writing Report 1st Nov 38 When handed in at Local Office N. 3. 1938 Port of Bremen / Augsburg

No. in Survey held at Darmstadt Date, First Survey 6th April 37 Last Survey 20th July 1938
Reg. Book. Number of Visits 4

opening on the Single Screw vessel "Inverlec" Tons { Gross 9158
Triple Net 5496
Quadruple

Built at Vegeack By whom built Herrn Bremer Vulkan Yard No. 748 When built 1937/38

Owners THE INVER TANKERS LTD Port belonging to DUBLIN

Oil Engines made at Darmstadt By whom made Motorenfab. Darmstadt Contract No. - When made 1937

Generators made at Bremen By whom made A. G. G. Contract No. - When made 1937

No. of Sets 1 Engine Brake Horse Power 50 Nom. Horse Power as per Rule 12.2 Total Capacity of Generators 30 Kilowatts.

OIL ENGINES, &c.—Type of Engines R.B. 32 2 or 4 stroke cycle 3 Single or double acting single

Maximum pressure in cylinders 60 at 100 Diameter of cylinders 150 mm Length of stroke 270 mm No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 185 mm Is there a bearing between each crank yes

Revolutions per minute 500 Flywheel dia. 1050 Weight 300 kg Means of ignition dis. inject Kind of fuel used gas oil

Crank Shaft, dia. of journals as per Rule 90 mm Crank pin dia. 90 mm Crank Webs Mid. length breadth 140 mm Thickness parallel to axis -
as fitted Mid. length thickness 473 shrunk Thickness around eyehole -

Flywheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule - Thickness of cylinder liners 12.5 mm
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 yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material yes

Cooling Water Pumps, No. 1, 3 1/4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Lubricating Oil Pumps, No. and size 1, 500 ltr. per hr.

Air Compressors, No. 1 No. of stages 1 Diameters 100 mm Stroke 100 mm Driven by engine

Scavenging Air Pumps, No. 1, 300 m³/hr. Diameter rotary pump Stroke 100 mm Driven by same engine

AIR RECEIVERS:—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 yes

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

High Pressure Air Receivers, No. 1 Cubic capacity of each 1000 Internal diameter 100 mm thickness 10 mm

Seamless, lap welded or riveted longitudinal joint yes Material steel Range of tensile strength 40-50 Working pressure by Rules 10

Starting Air Receivers, No. 1 Total cubic capacity 1000 Internal diameter 100 mm thickness 10 mm

Seamless, lap welded or riveted longitudinal joint yes Material steel Range of tensile strength 40-50 Working pressure by Rules 10

ELECTRIC GENERATORS:—Type A. G. G. 30 Kw. No 52 69 901

Pressure of supply 115 volts. Full Load Current 260 Amperes. Direct or Alternating Current Direct.

If alternating current system, state the periodicity 50 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 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 crank shaft. 12-3-37 Receivers yes Separate Tanks yes
(If not, state date of approval)

SPARE GEAR as per Rules

The foregoing is a correct description,

Motorenfabrik Darmstadt
Aktiengesellschaft

Manufacturer.

Haggen



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Lloyd's Register

Foundation

W180-0016

Dates of Survey while building { During progress of work in shops - April 6, 2, 30, 1937. July 20, 1937
 { During erection on board vessel - - - ✓
 Total No. of visits 4

Dates of Examination of principal parts—Cylinders 30/4/37, 20/7/37 Covers 30/4/37, 20/7/37 Pistons 2/4/37, 20/7/37 Piston rods ✓

Connecting rods 6/4/37, 20/7/37 Crank and Flywheel shaft 2/4/37, 20/7/37 Intermediate shaft ✓

Crank and Flywheel shafts, Material S. M. Steel Identification Mark Lloyd's V.S. 64. 2-3-37.

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case Standard type If so, state name of vessel ✓

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

The auxiliary heavy oil engine has been constructed under special survey in accordance with the Soc. Rules and Regulations, as well as with the approved plans and instructions thereto.

The material used in the construction is good and the workmanship is satisfactory. This aux. engine has been tested running several hours under full load and 10% overload on the maker's test bed with satisfactory results.

In our opinion the vessel for which this heavy oil aux. engine is intended will be eligible for the notation of + L. M. B. (with date) when the whole machinery has been fitted satisfactorily on board and tried under full working conditions.

This auxiliary heavy oil engine has been satisfactorily installed on board tested under working conditions, and found satisfactory in all respects.

Primum 5. 3. 38
 A. Carstensen

Im. 2. 36.—Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ...	Rev. 84.00	When applied for,	30.7.19.37
1 x test bed trial "	21.00		
Travelling Expenses (if any) *	35.00	When received,	30.11.19.37
Welded found. plate	21.00		

Primum Account 7083

Committee's Minute

TUE 5 APR 1938

Assigned

See Primum. Rpt 2003

M. C. Meier, W. Petersen.
 Surveyor to Lloyd's Register of Shipping.



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