

# REPORT ON OIL ENGINE ~~ELECTRIC GENERATOR SETS~~

No. 56.

28 JAN 1931

Date of writing Report 20<sup>th</sup> January 1931. When handed in at Local Office

Port of

Received at London Office

No. in Survey held at Reg. Book.

Date, First Survey 27<sup>th</sup> Dec. 1930Last Survey 9<sup>th</sup> January 1931.

Number of Visits

Single  
on the Twin  
Triple Screw vessel  
Quadruple

Built at

Groningen

By whom built

J. J. Oomes

Yard No.

75

When built

Owners

Oil Engines made at

Oberkassel

By whom made

Humboldt-Deutzmotoren

Port belonging to

Contract No. 181273/24 When made 1931.

Generators made at

By whom made

Contract No. When made

No. of Sets

Engine Brake Horse Power 30

Nom. Horse Power as per Rule 8.6

Total Capacity of Generators Kilowatts.

OIL ENGINES, &amp;c. Type of Engines

Heavy Oil Engine Type P. 16. F. 322

stroke cycle Single or double acting

Maximum pressure in cylinders

45 kg/cm<sup>2</sup>

Diameter of cylinders

150 mm.

Length of stroke

220 mm.

No. of cylinders

2

No. of cranks

2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

210 mm.

Revolutions per minute

500

Flywheel dia.

950 mm.

Weight

300 kg.

Means of ignition

solid injection

Kind of fuel used

Yes

Crank Shaft, dia. of journals

as per Rule 90 mm.

as fitted 90 mm.

Crank pin dia.

90 mm.

Crank Webs

Mid. length breadth 128 mm.

Mid. length thickness

51 mm.

Thickness parallel to axis

shrink

Flywheel Shaft, diameter

as per Rule 85 mm.

as fitted 85 mm.

Intermediate Shafts, diameter

as per Rule

as fitted

Thickness of cylinder liners

16 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when declutched

Yes

Means of lubrication

by pressure

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

water cooler

Cooling Water Pumps, No.

1

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

Lubricating Oil Pumps, No. and size

1 cam wheel pump.

Air Compressors, No.

No. of stages

Diameters

Scavenging Air Pumps, No.

1

Diameter

260 mm.

Stroke

115 mm.

Driven by

levers.

AIR RECEIVERS:—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

volts.

Load

Amperes

Direct or Alternating Current

Is alternating current system, state frequency of periods per second

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

Do the generators, do they comply with the requirements regarding rating

are they compound wound

Are they over compounded 5 per cent.

if not compound wound state distance between each generator

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

ANS. Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

Receivers

Separate Tanks

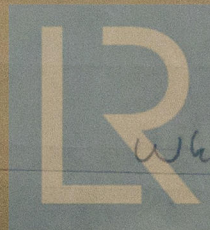
ARE GEAR comply with the Society's rules for auxiliary oil engines and besides a number of spare parts as ordered by the owners.

The foregoing is a correct description.

Humboldt-Deutzmotoren

Aktiengesellschaft

Manufacturer.




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Dates of Survey while building: During progress of work in shops - 27<sup>th</sup> Nov. 1930; 8<sup>th</sup> January; 9<sup>th</sup> January 1931.  
During erection on board vessel - - -  
Total No. of visits 3

Dates of Examination of principal parts - Cylinders 27<sup>th</sup> Nov. Covers 27<sup>th</sup> Nov. Pistons 9<sup>th</sup> January Piston rods  
Connecting rods 9<sup>th</sup> January Crank and Flywheel shaft 9<sup>th</sup> January Intermediate shaft  
Crank and Flywheel shafts, Material Siemens Martin Steel Identification Mark W. R. 3865. F. 10.30.

Intermediate shafts, Material Identification Marks  
Is this machinery duplicate of a previous case Yes If so, state name of vessel Annular Type of P. H. L. 122. fitted with scavenging pump.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
This auxiliary oil engine was built in accordance with the approved plans and the requirements of the Society's Rules. Materials and workmanship are of best quality. The outfit is ample. The engine has been tested and examined on the trial bed in the makers shop under full working condition for 2 hours and for further 2 hours with 10% overload. The engine was found in safe working condition. After trial all working parts of the engine have been examined after opening and were found in good condition. The engine is eligible in my opinion for notation in the Register Book with  L.M.C. after having been satisfactorily checked on board of vessel.

Im. 9.28 - Transfer.  
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 0 :  
Travelling Expenses (if any) £ 2 : 12 :  
When applied for, 19 Jan. 1931.  
When received, 19 Jan. 1931.

TUE. 26 JAN 1932

Committee's Minute

FRI. 8 JAN 1932

Assigned



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