

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 and cleaned Is a drain 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 Actual

Starting Air Receivers, No. three Total cubic capacity 3 x 500 lts. Internal diameter 450 mm thickness 12 mm

Seamless, lap welded or riveted longitudinal joint welded Material S.M. Steel Range of tensile strength 38-44 kg/cm<sup>2</sup> Working pressure by Rules Actual 30 kgs/cm<sup>2</sup>

IS A DONKEY BOILER FITTED? If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting 219409 7.2.36. Receivers G.O.244 21.7.32 Separate Fuel Tanks

Donkey Boilers General Pumping Arrangements Pumping Arrangements in Machinery Space

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes.

State the principal additional spare gear supplied

The foregoing is a correct description, Humboldt-Deutzmotoren Aktiengesellschaft Manufacturer.

Dates of Survey while building 13.1., 25.1., 22.3., 10.4., 14.4., 16.4., 19.4., 22.4., 23.4., 10.5., 13.5., and 14.5.1937

Dates of Examination of principal parts—Cylinders 10.4., 22.3.37 Covers 14.4., 12.5.37 Pistons 13.5.37 Rods Connecting rods 12.4., 25.1., 13.5.37

Is the flash point of the oil to be used over 150° F. Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

Is this machinery duplicate of a previous case yes If so, state name of vessel Hy. Robb (Id.) (Incorporating Ramage & Ferguson (Id.) Yard No. 242 Dusseldorf Report No. 168

General Remarks (State quality of workmanship, opinions as to class, &c.) These heavy oil engines have been constructed under special survey in accordance with the Society's Rules and Regulations as well as in accordance with the approved plans and instructions thereto.

The amount of Entry Fee .. RM 30.- When applied for, Dismissed Special ... RM 520.- 3.6.1937 % 12/10/10 Mr. Kinggemann Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 8 JUN 1938 Assigned See ltr. 26. 19587

Rpt. 4c. STARBUZZ. REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS No. 169

Date of writing Report 3.5.1937 When handed in at Local Office 5.5.1937 Port of Dusseldorf. Received at London Office 13 MAY 1937

No. in Survey held at Reg. Book. Oberursel Date, First Survey 26.2.1937. Last Survey 22.4.1937.

Built at Leith By whom built Hy. Robb, (Id.) (Incorporating Ramage & Ferguson (Id.) Yard No. 242 When built 1937

Oil Engines made at Oberursel By whom made Humboldt-Deutzmotoren AG Contract No. 438985/86 When made 1937

Generators made at By whom made Contract No. When made

No. of Sets Engine Brake Horse Power 2 x 30 Nom. Horse Power as per Rule 2 x 8.6 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy Oil Engines A 2 M 317 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 kgs/cm<sup>2</sup> Diameter of cylinders 120 mm Length of stroke 170 mm No. of cylinders 2 No. of cranks 2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 412 mm, from centre to centre of ball bearing Is there a bearing between each crank no

Revolutions per minute 1350 Flywheel dia. 550 mm Weight 210 kgs. Means of ignition dir. inject kind of fuel used gas oil on test bed

Crank Shaft, dia. of journals as per Rule as fitted 75 mm Crank pin dia. 85 mm Crank Webs Mid. length breadth 120 mm Thickness parallel to axis 61 mm-shrunk Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 22 mm

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

Cooling Water Pumps, No. 1, cog wheel type Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size 1, 220 lts/h.

Air Compressors, No. No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. Diameter Stroke Driven by

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

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. Full Load Current Amperes. Direct or Alternating Current

If alternating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off

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

Are all terminals accessible, clearly marked, and furnished with sockets Are the lubricating arrangements of the generators as per Rule

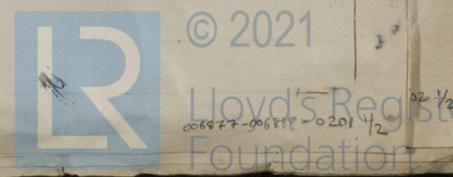
If the generators are under 100 kw. full load rating, have the makers supplied certificates of test and do the results comply with the requirements

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

PLANS. Are approved plans forwarded herewith for Shafting yes, 217 005 A Receivers Separate Tanks (If not, state date of approval) 8.5.35.

SPARE GEAR as required by the Rules

The foregoing is a correct description, Humboldt-Deutzmotoren Aktiengesellschaft Manufacturer.



Dates of Survey while building { During progress of work in shops - - } 26.2.37., 1.3.37., 3.3.37., 22.4.37.  
 { During erection on board vessel - - - }  
 Total No. of visits \_\_\_\_\_  
 Dates of Examination of principal parts—Cylinders 22.4.37. Liners: 22.4.37. Covers 22.4.37. Pistons 22.4.37. Piston rods \_\_\_\_\_  
 Connecting rods 26.2.37., 22.4.37. Crank and Flywheel shaft 1.3.37, 3.3.37, 22.4.37. Intermediate shaft \_\_\_\_\_  
 Crank and Flywheel shafts, Material Chrome molybdenum Identification Mark 152 H.B. Connecting rods: 170 H.B.  
 Intermediate shafts, Material \_\_\_\_\_ Identification Marks \_\_\_\_\_  
 Is this machinery duplicate of a previous case \_\_\_\_\_ If so, state name of vessel \_\_\_\_\_

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

These two auxiliary engines have been constructed under special survey in accordance with the Society's Rules and Regulations as well as with the approved plan and the instructions thereto.

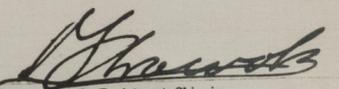
The material used in the constructed was found to be good and the workmanship satisfactory. The auxiliary engines have been tested on Maker's test bed in the presence of the undersigned under full load and 10% overload during 8 hours and were found working satisfactorily during these trials. After trials all working parts of these engines have been opened out for examination and were found in good condition.

The main engine for the same vessel will also be constructed at the works of Messrs. Humboldt-Deutzmotoren A.G., Köln-Deutz.

A copy of this report has been forward to the Leith Surveyors.

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

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

  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute \_\_\_\_\_  
 Assigned \_\_\_\_\_  
 JUN 3 1937