

16 SEP 1939

AUXILIARY

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 331

Rpt. 4c.

Com. No. 649838 b

Received at London Office JUL 14 1939

Date of writing Report 5.7.1939 When handed in at Local Office 10.7.1939 Port of Düsseldorf

No. in Survey held at Reg. Book. Date, First Survey 18.3.39. Last Survey 30.6.1939. Number of Visits 5

Single
on the Twin
Triple
Quadruple
Screw vessel

Tons { Gross
Net

Built at Westerbroek

By whom built N.V.Smit & Zoon's Scheeps. Yard No. 661 When built

Owners Port belonging to Engine

Oil Engines made at Cologne By whom made Klöckner-Humboldt-Deutz Company No. 620828 When made 1939

Generators made at By whom made Contract No. When made

No. of Sets 1 Aux. Engine Brake Horse Power 10 Nom. Horse Power as per Rule 2.9 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy Oil engine M.A.H. 716 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 120 mm Length of stroke 160 mm No. of cylinders 1 No. of cranks 1

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 296 mm Is there a bearing between each crank yes

Revolutions per minute 1000 Flywheel dia. 2 x 650 mm Weight 2 x 82 kg Means of ignition sol. inject Kind of fuel used on test bed gas oil

Crank Shaft, dia. of journals as per Rule 70 mm as fitted Crank pin dia. 75 mm Crank Webs Mid. length breadth 100 mm Thickness parallel to axis 42 mm Mid. length thickness 42 mm Thickness around eye-hole

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as fitted Thickness of cylinder liners 15 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 no

Cooling Water Pumps, No. none Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size 1 pump driven by an eccentric Capacity 37 lts/h

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 What means are provided for cleaning their inner surfaces

Can the internal surfaces of the receivers be examined

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. 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 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

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 214039 28.11.35 Receivers Separate Tanks

SPARE GEAR As per Rules

The foregoing is a correct description,

Klöckner-Humboldt-Deutz AG

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - } 18.3., 29.3., 25.5., 31.5., 30.6. 1939.
{ During erection on board vessel - - - }
Total No. of visits

Liners 31.5., 30.6.
Dates of Examination of principal parts—Cylinders 31.5. Covers 31.5., 30.6. Pistons 30.6. Piston rods
Connecting rods 25.5., 31.5., 30.6. Crank ~~shafts~~ shafts 18.3., 29.3., 25.5. Intermediate shafts 30.6.
Crank ~~shafts~~ shafts, Material Manganese Steel Identification Marks LLOYD'S 3914 H.B. 25.5.39.
Intermediate shafts, Material Connecting Rods: Identification Marks 429 H.B.
Identification marks on Air Receivers

Is this machinery duplicate of a previous case yes If so, state name of vessel Hawthorn, Leslie & Co., Yard No. 603 (Düsseldorf Reprt No. 108)

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

This auxiliary engine has 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 auxiliary engine has been tested on Makers' test bed in the presence of the undersigned under full load during 7 hours and 10 % overload during 1 hour and was found working satisfactory during these trials. After trials all working parts have been opened out for examination and were found in good condition. The material used in the construction was found to be good and the workmanship satisfactory. The main engine is also being built by Messrs. Klöckner-Humboldt-Deutz. Copy of this report has been sent to Rotterdam.

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

Committee's Minute
Assigned

H. G. G. G. G. G.
Surveyor to Lloyd's Register of Shipping.



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