

Rpt. 4c.

HD No. 2053 7242

LR 172

Date of writing Report 20.8. 19

When handed in at Local Office 19

Port of

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Düsseldorf

No. 184

15 SEP 1955

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. in Survey held at Köln-Deutz Date, First Survey 9.5. Last Survey 1.8. 19 55  
Reg. Book. "ARSEPLOG" Number of Visits 5Single  
on the Twin Screw vessel  
Triple  
Quadruple  
Stockholm  
Built at By whom built Electro Diesel Lidingö Yard No. When built

Owners. Port belonging to 1800545-50

Oil Engines made at Köln-Deutz By whom made Klöckner-Humboldt-Deutz Engine No. When made 8.55

Generators made at By whom made Generator No. When made

No. of Sets One B.H.P. of each Set 99 M.N. as per Rule 19.8 Capacity of each Generator Kilowatts.

Is Set intended for essential services.

OIL ENGINES, &amp;c.—Type of Engines Airless Inj. Heavy Oil A6M517 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 70 kg/cm<sup>2</sup> Diameter of cylinders 130 mm Length of stroke 170 mm No. of cylinders 6 No. of cranks 6Mean indicated pressure 6.96 kg/cm<sup>2</sup> Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 137 mmIs there a bearing between each crank yes Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 28.9 kg/m<sup>2</sup> Revolutions per minute 1100

Flywheel dia. 550 mm Weight 145 kg Means of ignition compr. Kind of fuel used Diesel

Crank Shaft, Solid forged dia. of journals as per Rule 85 mm Crank pin dia. 85 mm Mid. length breadth 130 mm Thickness parallel to axis  
Semi-built as fitted 90 mm Crank Webs Mid. length thickness 32.5 mm Thickness round eyehole  
All-builtFlywheel Shaft, diameter bolted to flange Generator armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>)  
as fitted end of crankshaft

Are means provided to prevent racing of the engine yes Means of lubrication forced Kind of damper if fitted vibration damper

Are the cylinders fitted with safety valves no Are the exhaust pipes and silencers manifolds water cooled or lagged with non-conducting material yes

Cooling Water Pumps, No. and how driven one by main engine suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size one driven by main engine capacity 45 ltrs. per minute.

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

Scavenging Air Pumps or Blowers, No. How driven

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate

(other than main engines)  
State full details of safety devices

Can the internal surfaces of the receivers be examined and cleaned

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

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure

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 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 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

Details of driven machinery other than generator

PLANS.—Are approved plans forwarded herewith for Shafting appr. 21.3.51 Receivers Separate Tanks

Have Torsional Vibration characteristics if applicable been approved Armature shaft Drawing No.

(State date of approval and name of previous duplicate case, if any)

Has the spare gear required by the Rules been supplied yes

The foregoing is a correct description,

Klöckner-Humboldt-Deutz

Manufacturer.

H. T. Tammann



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Lloyd's Register

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Dates of Survey while building	During progress of work in shops - - )	1955:- May 9. 31. June 23. July 5. August 1.
	During erection on board vessel - - )	
	Total No. of visits.....	5

Dates of Examination of principal parts—Cylinders 31.5. 5.7. Covers 31.5. 5.7. Pistons 5.7. Piston rods—

Connecting rods 9.5. 31.5. 5.7. Crank and Flywheel shafts 31.5. 5.7. Intermediate shafts           

Crank shaft { Material S.M. Steel Y.P. 60.4 kg/mm<sup>2</sup> Tensile strength 81.0 kg/mm<sup>2</sup>  
Elongation 23.0 % on 50 mm Identification Marks Lloyd's 723 H.S. 7.1.55

Flywheel shaft, Material..... Identification Marks.....

*Identification marks on Air Receivers.*

Is this machinery duplicate of a previous case yes If so, state name of vessel Hansa Motorenfabrik, Hamburg Rept. N. 150

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.).

This engine has been constructed under special survey of tested materials and is in accordance with the Secretary's letters, approved plans and Rule Requirements. The materials and workmanship are good and the engine, when tested in the shops under full and overload condition, was found to function satisfactorily. The governor tests were also satisfactory. This engine in my opinion is suitable for installation in a vessel classed with the Society.

The amount of Fee ... £ DM : 200.-  
Running Test DM : 100.-  
Travelling Expenses (if any) £ DM : 30.-  
A/c D 6474

When applied for..... 19.....  
When received..... 19.....

TUESDAY 20 MAR 1956

### Committee's Minute.

*Assigned*

See Rpt. 4 C.

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

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Foundation