

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 8422.

Writing Report 16.11. 51. When handed in at Local Office 19 Port of Stockholm Received at London Office 21 NOV 1951

Survey held at Hedemora Date, First Survey 29.6. Last Survey 21.9. 1951

Single on the Twin Triple Quadruple Screw vessel - M/T. SHETLAND Number of Visits 3 Tons Gross Net

Gothenburg By whom built AB Lindholmens Varv Yard No. 1017 When built 1951

A/S Det Dansk-Franske D/S Port belonging to

Engs. made at Hedemora By whom made AB Hedemora Verkstäder Contract No. 53.54.55 When made 1951

rs made at By whom made Contract No. When made

ets 3 Engine Brake Horse Power 3 x 210 M.N. as per Rule 3 x 53 Total Capacity of Generators Kilowatts.

tended for essential services Yes

No. 10 NGINES, &c.—Type of Engines Göta Verken DM 240/360 H.5 2 or 4 stroke cycle 4 Single or double acting SA

been in pressure in cylinders 45 kg/cm² Diameter of cylinders 240 mm Length of stroke 360 mm No. of cylinders 5 No. of cranks 5

workin licated 6.8 kg/cm² Firing order in cylinders 1.3.5.4.2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 311 mm

a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) Revolutions per minute 450

dia 1250 mm Weight 1910 kgs Means of ignition Compression Kind of fuel used Heavy Oil

rtific shaft, dia. of journals as per Rule appd. & as fitted 160 mm Crank pin dia. 160 mm Crank Webs Mid. length breadth 215 mm Thickness parallel to axis

Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted General armature, moment of inertia (16 m² or Kg.-cm.²)

ns provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted None

ylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

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

ing Oil Pumps, No. and size One on each engine.

pressors, No. None No. of stages Diameters Stroke Driven by

ing Air Pumps, No. None Diameter Stroke Driven by

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

ceiver, which can be isolated, fitted with a safety valve as per Rule

internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

a drain arrangement fitted at the lowest part of each receiver

essure Air Receivers, No. Cubic capacity of each Internal diameter thickness

lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Air Receivers, No. Total cubic capacity Internal diameter thickness

lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

RIC GENERATORS:—Type KL 21 B THRIGE Nos. 30003544/5/6

of supply 230 volts. Full Load Current 610 Amperes. Direct or Alternating Current Direct

ating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

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

rminals accessible, clearly marked, and furnished with sockets Are they so spaced

d that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

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

erators are 100 kw. or over have they been built and tested under survey

driven machinery other than generator

Are approved plans forwarded herewith for Shafting 8.7.1949 Receivers Separate Tanks

sional Vibration characteristics if applicable been approved 20.5.1949 Armature shaft Drawing No.

GEAR To be checked onboard.

The foregoing is a correct description,

AKTIEBOLAGET

HEDEMORA VERKSTÄDER

and the particulars of the installation are as approved for torsional vibration characteristics.

Manufacturer.

Lloyd's Register

011864-011876-0044

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Dates of Survey while building { During progress of work in shops - - } 1951:- 29th June, 10th July, 21st September.
{ During erection on board vessel - - } -
Total No. of visits 3 in shop

Dates of Examination of principal parts - Cylinders 29.6 & 10.7.51 Covers 29.6. & 10.7.51 Pistons - Piston rods -

Connecting rods - Crank and Flywheel shafts 12.10.50 Intermediate shafts -

Crank shaft { Material S.M. steel Tensile strength 53.3, 46.1 & 51.3 kg/mm²
Elongation 30.0, 35.0 & 35.0 % on 50 mm Identification Marks See below

Flywheel shaft, Material Flywheel fitted on crankshaft. Identification Marks -

Identification marks on Air Receivers -

Is this machinery duplicate of a previous case Yes If so, state name of vessel m.s. "CHRISTIANSBORG", Skm. Rpt. No. 8173.

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

The above auxiliary engines have been made under Special Survey and in accordance with the Rules, plans and the Secretary's letters.

The workmanship is good and the materials fulfils the requirements of the Rules. Test sheets for shafting are attached.

The engines have been tested under working conditions on the test bed and found to work satisfactorily.

Identification marks on crankshefts:-

Engine No. 53:- LLOYDS 222 Bn 12.10.50

Engine No. 54:- LLOYDS 223 Bn 12.10.50

Engine No. 55:- LLOYDS 224 Bn 12.10.50

5m. 1. 48. - T. (MADE AND PRINTED IN ENGLAND)
(The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... Kr. 560:- : When applied for 16.11. 19 51.

Travelling Expenses (if any) Kr. 213:10 : When received 19

Committee's Minute

Assigned



W.A. Bookin H. Paul J.
Surveyor to Lloyd's Register of Ships

Lloyd's Register
Foundation