

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 13058.

12 MAY 1950

Received at London Office

Date of writing Report 8th May 1950 When handed in at Local Office 19 Port of Copenhagen

No. in Survey held at Katindborg Date, First Survey 16 February 1949 Last Survey 21st Nov. 1949

Reg. Book. 12175 on the Single Screw vessel HENNING MAZSK For stock at Odense Steel Works Number of Visits 3 Gross 10106 Net 6117

Built at Odense By whom built Odense Steel Works A/S Yard No. 97 When built 1945-7

Owners A/S S/S Jernbane v D/S af 1912 Port belonging to Jernbane

Oil Engines made at Katindborg By whom made Motofabriken BUKH ENGIN No. 6219- When made 1949

Generators made at Belgisk By whom made Starland, Wolff GENSET No. 8880- When made 1949

No. of Sets 2 Engine Brake Horse Power 47 M.N. as per Rule 47 Total Capacity of Generators 60 Kilowatts.

Is Set intended for essential services

OIL ENGINES, &c.—Type of Engines Heavy oil, 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 60 Diameter of cylinders 135 mm Length of stroke 180 mm No. of cylinders 5 No. of cranks 5

Mean indicated pressure 6.53 kg/cm² Firing order in cylinders 1-2-4-5-3 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 138 mm

Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 46.5 x 10⁴ Revolutions per minute 625

Flywheel dia. 675 mm Weight 180 kg Means of ignition compression Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule Crank pin dia. 85 mm Crank Webs shrunk

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

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication forced Kind of damper if fitted ✓

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

Cooling Water Pumps, No. 1 off 1.8 g/h Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

Lubricating Oil Pumps, No. and size 1 off rotary 4 g/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

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 enclosed, ventilated

Pressure of supply 110 volts. Full Load Current 273 Amperes. Direct or Alternating Current Direct

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

Are all terminals accessible, clearly marked, and furnished with sockets Yes Are they so spaced Yes

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

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

Do 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 No 3/11-47 Receivers ✓ Separate Tanks ✓

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

SHAFTING as per Rules

The foregoing is a correct description,
MOTOFABRIKEN BUKH
 HENNING MAZSK AB
 Manufacturer.
Katindborg



004591-004595-0071

Dates of Survey while building
 During progress of work in-shops - - 1949: 1/2 - 2/4 - 2/11.
 During erection on board vessel - - -
 Total No. of visits 3+

Dates of Examination of principal parts—Cylinders and Covers and Pistons and Piston rods ✓

Connecting rods 1/2-49. Crank and Flywheel shafts 1/2-49 Intermediate shafts ✓

Crank shaft Material Low Steel Tensile strength 79.9 kg/mm²
 Elongation 25.4% on 50mm. Identification Marks LLOYD'S N: 836-834 1/2-12.49
 ENG. N: 6219-6220.

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 M/S HENNING MERIK. Gen. Reg. N-13057.

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

The above oil engines have been constructed under Special Licence in accordance with the Rules and plans approved by the Lloyds Rules & dated 3rd. November 1947 and originally intended for Gen'd N: 113 by Messrs. Odense Skibsstaempe A/S, Odense.

The material used has been examined and tested as required by the Rules of this Society, the crankshafts as per Copenhagen Cert. N: 10036 of the 12th. November 1948 and the connecting rods as per Copenhagen Cert. N: 7128.

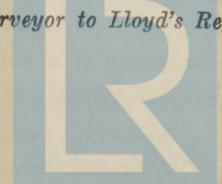
The engines have been tested at Madsen works and found to work satisfactorily.

The generator sets have now been placed in stock at Odense Skibsstaempe A/S, Odense.

50 (MADE AND PRINTED IN ENGLAND)

The amount of Fee ... kr. 150,- :
 Travelling Expenses (if any) £ — :
 When applied for 19 50
 When received 19

Committee's Minute... FRI 19 MAY 1950
 Assigned... See Incl 10900

[Signature]
 Surveyor to Lloyd's Register of Shipping.
 Lloyd's Register of Shipping Foundation