

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10742

Date of writing Report 28 Nov. 1938 When handed in at Local Office 10 Port of Copenhagen
 Received at London Office DEL

Survey held at Copenhagen & Odense Date, First Survey 20th April 1937 Last Survey 24/11 1938
 Number of Visits 32

on the Single Screw vessel "HULDA MÆRSK" Tons { Gross 5750 Net 3390

By whom built Odense Skibsværft Yard No. 75 When built 1938
O/S Svendborg & O/S af 1912 A/S (A.P. Møller) Port belonging to Copenhagen

Engines made at Copenhagen By whom made Bürmeister & Wain Contract No. 3835-36-37 When made 1938
 Generators made at Odense By whom made Thomas B. Thrigo Contract No. 230966-67-68 When made 1938

of Sets 3 Engine Brake Horse Power 170 Nom. Horse Power as per Rule 170 Total Capacity of Generators 336 Kilowatts.

ENGINES, &c.—Type of Engines Diesel, trunk type, solid injection 2 or 4 stroke cycle 2 Single or double acting single
 Maximum pressure in cylinders 49 kg/cm² Diameter of cylinders 220 mm Length of stroke 370 mm No. of cylinders 3 No. of cranks 3
 Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge 284 mm Is there a bearing between each crank yes

Revolutions per minute 360 Flywheel dia. 1200 mm Weight 1550 kg. Means of ignition Compression Kind of fuel used Diesel oil
 Crank Shaft, dia. of journals as per Rule 124 mm as fitted 150 mm Crank pin dia. 150 mm Crank Webs Mid. length breadth 242 mm Thickness parallel to axis 85 mm
 as per Rule 124 mm as fitted 150 mm Intermediate Shafts, diameter as per Rule ✓ as fitted ✓ Thickness of cylinder liners 18 mm
 Thickness around eyehole 67.5 mm

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 lagged.

Driving Water Pumps, No. 2 off - independent Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes.
 Lubricating Oil Pumps, No. and size One off for each engine, gearwheel type, Capacity 4.5 Tons/Hour each.
 Compressors, No. One off for each engine No. of stages two Diameters 19.8 m³/min Stroke Rotary Driven by chain from crank shaft

RECEIVERS:—Have they been made under Survey yes State No. of Report or Certificate 834
 Each receiver, which can be isolated, fitted with a safety valve as per Rule yes
 Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces ✓
 Is there a drain arrangement fitted at the lowest part of each receiver yes

Pressure Air Receivers, No. ✓ Cubic capacity of each 200 litres Internal diameter 380 mm thickness 110 mm
 Material Lap welded Range of tensile strength 41.8 kg/mm² Working pressure by Rules 35.2 kg/cm²

Electric Generators:—Type drip proof, ventilated.
 Voltage of supply 220 volts. Full Load Current 510 Amperes. Direct or Alternating Current direct.

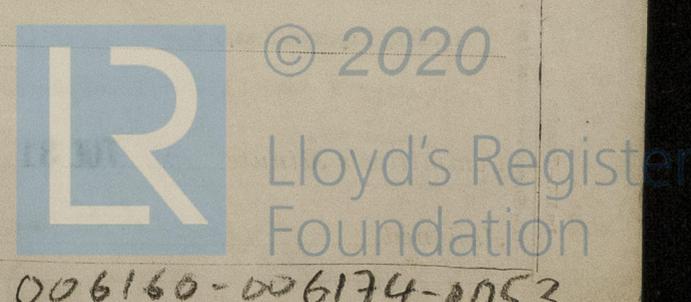
Are the generators under 100 kw. full load rating, have the Makers supplied certificates of test ✓ and do the results comply with the requirements ✓
 Are approved plans forwarded herewith for Shafting yes Receivers 4/2-1935. Separate Tanks ✓

Are they compounded as per rule yes. Is there an adjustable regulating resistance fitted in series with each field yes
 Are all terminals accessible, clearly marked, and furnished with sockets yes.
 Are the terminals so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes.

Generators are 100 kw. or over have they been built and tested under survey yes.
 Are approved plans forwarded herewith for Shafting yes Receivers 4/2-1935. Separate Tanks ✓

GEAR supplied as required by the Rules.

The foregoing is a correct description,
 AKTIESELSKABET
 BÜRMEISTER & WAIN'S MASKIN- OG SKIBSBYGGERI
 A. Møller
 Manufacturer.



006160-006174-0053

Dates of Survey while building
 During progress of work in shops - - 20/4 - 26/4 1937 - 10/1 - 15/2 - 23/2 - 28/4 - 2/5 - 5/5 - 6/5 - 1/6 - 15/6 - 28/6 - 29/6 - 18/7 - 2/7 - 26/7 - 30/7 - 1/8 - 4/8 - 9/8 - 1/9 - 9/9 - 1938
 During erection on board vessel - - - 6/9 - 12/9 - 27/9 - 11/10 - 24/10 - 28/10 - 1/11 - 21/11 - 24/11
 Total No. of visits 32

Dates of Examination of principal parts - Cylinders with Covers 7/6 - 21/7 - 27/7-38 Pistons 21/7 - 30/7-38 Piston rods ✓
 Connecting rods 20/4 - 26/4 1937 - 10/1 1938 Crank and Flywheel shafts 19/2 - 23/2 - 2/5 - 29/6 1938 Intermediate shafts ✓

Crank and Flywheel shafts, Material S. M. Steel Identification Marks Lloyd's No 4198-99-4200 cv. 29.6.38
 Intermediate shafts, Material ✓ Identification Marks ✓

Identification marks on Air Receivers No 834. Lloyd's Test 56 Hbm. W.P. 28 Hbm cv. 9. 8-38.

Is this machinery duplicate of a previous case *Yes*. If so, state name of vessel *M.S. "Selandia"*

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The above generator sets have been constructed under special survey, in accordance with the Rules requirements and the approved plans.
 The workmanship is of good description throughout.
 On completion and when installed on board the generator sets were tested under full power working condition and found to be working satisfactorily.

1 in. 5.31. - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

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

Christoffer de Vester
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE 31 JAN 1939**
 Assigned *See PE machy rpl.*

