

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10924

JUN 15 1939

Date of writing Report 25<sup>th</sup> May 1939 When handed in at Local Office 12/6 1939 Port of Copenhagen  
 No. in Survey held at Stamundborg & Odense Date, First Survey 12<sup>th</sup> January 1939 Last Survey 22<sup>nd</sup> May 1939  
 Reg. Book. 8522 on the Single Screw vessel "INGE MÆRSK" Number of Visits 9

Built at Odense By whom built Odense Staalskibsvaerk Yard No. 78 When built 1939  
 Owners A/S "Sjendborg" of "D/S AF 1912" A/S Port belonging to Copenhagen  
 Oil Engines made at Stamundborg By whom made Motofabriken Bueh & Søn Contract No. 4378 When made 1939  
 Generators made at Odense By whom made Thomas B. Thunge Contract No. 232308 When made 1939

No. of Sets one Engine Brake Horse Power 27 Nom. Horse Power as per Rule 8.26 Total Capacity of Generators 16 Kilowatts.  
 Tons { Gross 936.77  
 Net 5819.19

OIL ENGINES, &c.—Type of Engines Vertical Diesel engine with injection 2 or 4 stroke cycle 4 Single or double acting single  
 Maximum pressure in cylinders 40 kg/cm<sup>2</sup> Diameter of cylinders 135 mm Length of stroke 180 mm No. of cylinders 3 No. of cranks 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  
 Revolutions per minute 600 Flywheel dia. 750 mm Weight 400 kg Means of ignition compression Kind of fuel used Gas oil  
 Crank Shaft, dia. of journals as per Rule 70.5 mm Crank pin dia. 85 mm Crank Webs Mid. length breadth 135 mm Thickness parallel to axis shrunk  
as fitted 95 mm Mid. length thickness 38 mm Thickness around eye-hole shrunk  
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 15 mm  
as fitted as fitted

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication oil  
 Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material silencer water cool  
 Cooling Water Pumps, No. 1 of 600 litres per hour Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes  
 Lubricating Oil Pumps, No. and size 1 of 300 litres per hour

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 -

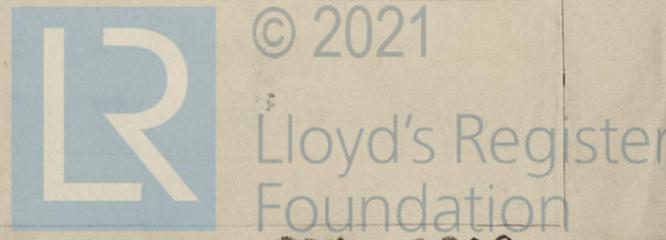
High Pressure Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -  
 Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -  
 Starting Air Receivers, No. - Total cubic capacity - Internal diameter - thickness -  
 Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

ELECTRIC GENERATORS:—Type Drop proof ventilated  
 Pressure of supply 110 volts. Full Load Current 145 Amperes. Direct or Alternating Current direct  
 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 yes  
 Generators, are they compounded as per rule yes is an adjustable regulating resistance fitted in series with each shunt field yes  
 Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched yes Are all terminals accessible, clearly marked, and furnished with sockets yes  
 Are the lubricating arrangements of the generators as per Rule yes  
 If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test how with and do the results comply with the requirements yes  
 If the generators are 100 kw. or over have they been built and tested under survey -

PLANS. Are approved plans forwarded herewith for Shafting no 28/2-38 Receivers - Separate Tanks -  
 (If not, state date of approval)

SPARE GEAR 1 inlet valve, 1 exhaust valve, 4 piston rings, 2 scraping rings, 2 stones  
4 stay bolts for cylinder, 1 connecting rod complete with bolts, 1 gudgeon pin, 2  
studs with nuts for main bearing, 1 delivery valve with seal & spring for fuel pump,  
1 plunger with bush for fuel pump, 1 set of valves for cooling w. pump, 1 set of  
rocking arms, 2 springs for safety valve, 1 starting air valve spindle with spring  
Sundry packings, tools etc.

The foregoing is a correct description,  
 MOTORFABRIKEN BUKH  
 AKTIESELSKAB  
 Manufacturer.



004573-004578-0069

Dates of Survey while building  
 During progress of work in shops - - 12/1 - 14/1 - 2/2 - 22/2 - 25/4 - 1939  
 During erection on board vessel - - - 28/4 - 8/5 - 19/5 - 22/5 - 39  
 Total No. of visits 7

Dates of Examination of principal parts—Cylinders 2/2 - 39 Covers 2/2 - 39 Pistons 2/2 - 39 Piston rods -  
 Connecting rods 2/2 - 22/2 - 25/4 - 1939 Crank and Flywheel shafts 12/1 - 14/1 - 2/2 - 39 Intermediate shafts -  
 Crank and Flywheel shafts, Material S. M. Steel Identification Marks LLOYD'S NO 4549 H 2.2.39  
 Intermediate shafts, Material - Identification Marks -  
 Identification marks on Air Receivers -

Is this machinery duplicate of a previous case *no* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) *The above auxiliary engine has been constructed and fitted on board under special survey in accordance with the Rules, the approved plans and the requirements contained in the Secretary's letters.*

*The material used in construction has been tested as required by the Rules and the workmanship is good.*

1 in. 5. 37. - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... *£n. 150.00* : When applied for, 26.5.19.39  
 Travelling Expenses (if any) *£n. 27.90* : When received, 3.6.19.39

*Christoph. J. Langhela Jensen*  
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute *PRI 23 JUN 1939*  
 Assigned *See KE machy*

