

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 15164<sup>E</sup>

Received at London Office

MAR - 3 1938

Date of writing Report Mar 10 20 When handed in at Local Office 10 Port of Amsterdam

No. in Survey held at Hengelo Amsterdam Date, First Survey 21 April Last Survey 16 Feb 1930  
Reg. Book. Number of Visits 17

on the <sup>Single</sup> ~~Twin~~ ~~Trip~~ ~~Quadruple~~ Screw vessel Motor Vessel "TRAFALGAR" Tons { Gross 5542  
Net 3300,51

Built at Amsterdam By whom built Ned Scheepb. M<sup>o</sup> Yard No. 268 When built 1930

Owners Wilhelm Wilhelmsen Port belonging to Tjensberg

Oil Engines made at Hengelo By whom made N.V. Stork & Co Contract No. 3997/90 When made 1930

Generators made at Odense By whom made Thomas B. Phuz Contract No. 22940 22954 22954x When made 1937

No. of Sets 3 Engine Brake Horse Power 180 Nom. Horse Power as per Rule 180 Total Capacity of Generators 120 Kilowatts.

OIL ENGINES, &c. — Type of Engines Direct injection 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 45 kg/cm<sup>2</sup> Diameter of cylinders 275 mm Length of stroke 450 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 320 mm Is there a bearing between each crank Yes

Revolutions per minute 360 Flywheel dia. 1600 mm Weight 3 Means of ignition Solid inject Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals <sup>as per Rule approved</sup> ~~as fitted~~ 180 mm Crank pin dia. 100 mm Crank Webs <sup>Mid. length breadth 320 mm</sup> ~~shrunken~~ Thickness parallel to axis ✓  
<sup>Mid. length thickness 22 mm</sup> Thickness around eye-hole ✓

Flywheel Shaft, diameter <sup>as per Rule ✓</sup> ~~as fitted~~ ✓ Intermediate Shafts, diameter <sup>as per Rule ✓</sup> ~~as fitted~~ ✓ Thickness of cylinder liners 2.2 mm

Is a 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

Cooling Water Pumps, No. 1 Rotary 15 l/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 Rotary 2 l/hour

Air Compressors, No. 2 No. of stages 2 Diameters 225 x 85 mm Stroke 100 mm Driven by two engines

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

AIR RECEIVERS: — Have they been made under Survey Yes State No. of Report or Certificate 4071

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

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

Is there a drain arrangement fitted at the lowest part of each receiver Yes

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. one Total cubic capacity 100 l Internal diameter 300 mm thickness 10 mm

Seamless, lap welded or riveted longitudinal joint Seamless Material SMS Range of tensile strength 40-46 kg Working pressure by Rules approved

ELECTRIC GENERATORS: — Type Direct current drip proof compound

Pressure of supply 220 volts. Full Load Current 545 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 all terminals accessible, clearly marked, and furnished with sockets Yes

Are they 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

If 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

If the generators are 100 kw. or over have they been built and tested under survey Yes

PLANS. Are approved plans forwarded herewith for Shafting E 22-12-26 Receivers (As built 21-1-37) Separate Tanks ✓  
(If not, state date of approval)

SHAFTING GEAR

As per rules & per list ✓

The foregoing is a correct description,  
MACHINEFABRIEK GEBR. STORK & Co. N.V.

Manufacturer.



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Lloyd's Register  
Foundation

W224-0058

Dates of Survey while building } During progress of work in shops - - } 21 April - 24 May 3-10-14- 27 June 20-29 July 27 Aug - Sept 15 Oct  
 } During erection on board vessel - - - } 13-23 Nov. 8-20 Dec 10-16 February  
 Total No. of visits 17.

Dates of Examination of principal parts—Cylinders 10 June 27 Aug Covers 27 Aug Pistons 21 April 27 June Piston rods ✓

Connecting rods 21 April 27 June Crank and Flywheel shafts 20 July 15 Oct Intermediate shafts ✓

Crank and Flywheel shafts, Material SMS Identification Marks 9750-9759-9760  
 44048'S  
 P.K. 14-5-37 ✓

Intermediate shafts, Material Identification Marks ✓

Identification marks on Air Receivers Main Air receivers ✓

1 air bottle for small air compr driven by elect. Motor current from battery = 4071  
 44048'S lot 4128  
 W.P. 25 H.P.  
 4071 22-9-37 ✓

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 three engines have been made under special survey in accordance with the rules & Secretary's letters Workmanship throughout good Tested under full load & good

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

*J. H. Ingoldby*  
 Surveyor to Lloyd's Register of Shipping.

TUE 15 MAR 1938

Committee's Minute

Assigned

See Ans. J.E. 15164



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