

18 NOV 1953

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 14467

Received at London Office

Port 25th Oct 1953 When handed in at Local Office 19 Port of Copenhagen
held at Copenhagen and Nakskov Date, First Survey 4th December 1952 Last Survey 23rd Oct. 1953
Number of Visits 35
Single Triple Quadruple Screw vessel Steel Se Margit Gross 4467
Tons 2806
Net 2806
By whom built Nakskov Skibsverft Yard No. 133 When built 1953
Port belonging to Copenhagen
By whom made A/S Burmeister & Wain Engine No. 5652 When made 1953
By whom made Thomas B. Thrigs Generator No. 307655 When made 1953
B.H.P. of each Set 240 M.N. of each Set as per Rule 48 Capacity of each Generator 160 Kilowatts
essential services yes

S, &c. Type of Engines D.M. 425 M.H. - 40 Trunk piston type slide injection 2 or 4 stroke cycle 4 Single or double acting single ✓
in cylinders 60 kg/cm² Diameter of cylinders 245 mm Length of stroke 400 mm No. of cylinders 4 No. of cranks 4
7.2 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 315 mm ✓
between each crank yes Moment of inertia of flywheel (16 m² or Kg. m²) 2300 kgm² ✓
Revolutions per minute 500 ✓
Weight 2030 kg Means of ignition compression Kind of fuel used heavy oil 150° F
dia. of journals as per Rule 150.5 mm Mid. length breadth 296 mm Thickness parallel to axis 90 mm
Crank pin dia 170 mm Crank Webs as fitted 170 mm Mid. length thickness 90 mm Thickness round eye hole 86.5 mm
Generator armature, moment of inertia (16 m² or Kg. m²) 273 kgm²
ded to prevent racing of the engine yes ✓ Means of lubrication forced Kind of damper if fitted ✓
fitted with safety valves yes ✓ Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged
Pumps, No. and how driven 2 off elect. driven Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Pumps, No. and size 1 for each eng. driven direct size 6.9 m³/hour
No. of stages _____ Diameters _____ Stroke _____ Driven by _____
Pumps or Blowers, No. _____ How driven _____

ERS: Have they been made under Survey yes State No. of Report or Certificate 1177
of safety devices Safety valve and fusible plug
surfaces of the receivers be examined and cleaned yes
arrangement fitted at the lowest part of each receiver yes
Air Receivers, No. 1 Cubic capacity of each 250 liter Internal diameter 380 mm thickness 10 mm
Material elect. weld Range of tensile strength 41/47 kg/cm² Working pressure 25 Atm.
Total cubic capacity 250 liter Internal diameter 380 mm thickness 10 mm
Material elect. weld Range of tensile strength 41/47 kg/cm² Working pressure 25 Atm.

GENERATORS: Type Dripproof ventilated
Volts 220 Full Load Current 767 Amperes. Direct or Alternating Current Direct
current system, state the periodicity ✓ Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown
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 yes
Are they accessible, clearly marked, and furnished with sockets yes
Are they so spaced yes
Are they cannot be accidentally earthed, short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule ✓
Are under 100 kw. full load rating, have the makers supplied certificates of test ✓ and do the results comply with the requirements ✓
Are 100 kw. or over have they been built and tested under survey yes
Machinery other than generator none
Approved plans forwarded herewith for Shafting yes Receivers yes Separate Tanks yes
Vibration characteristics if applicable been approved yes 3rd Nov. 1952 Armature shaft Drawing No. 211353
(State date of approval and name of previous duplicate case, if any)
Are required by the Rules been supplied yes

The foregoing is a correct description,

AKTIESELSKABET
for BURMEISTER & WAIN'S MASKIN- OG SKIFTSZYKKER
Manufacturers.

© 2021

Lloyd's Register
Foundation

004003 - 004008 - 0082

Dates of Survey while building
 During progress of work in shops - 4/12 52 - 17/12 53 - 24/2 - 3/3 - 10/3 - 19/3 - 20/3 - 24/3 - 27/3 - 28/3 - 1/4 - 4/4 - 11/4 - 16/4 - 17/4 - 18/4 - 21/4 - 28/4 - 29/4 - 12/5 - 12/9 1953
 During erection on board vessel - 7/7 - 13/7 - 18/7 - 2/8 - 1/9 - 19/9 - 30/9 - 12/10 - 20/10 - 23/10 1953
 Total No. of visits - 35

Dates of Examination of principal parts - Cylinders 16/3 - 19/3 - 20/3 Covers 18/3 - 19/3 - 20/3 Pistons 18/3 - 19/3 - 20/3 Piston rods 18/3 - 19/3 - 20/3

Connecting rods 4/12 52 - 7/3 53 - 3/3 Crank and Flywheel shafts 25/3 Intermediate shafts 30.4 - 29.5 tons

Crank shaft Material crank thrusts cert S.M. steel
 journals S.M.S. steel
 Tensile strength 37.4 - 38.4 % on 2"
 Elongation 35.4 - % on 2"
 Identification Marks Lloyd's No 9440-4

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers No 1177 Lloyd's test 50 Atm W.C. 25 Atm O.C. 18

Is this machinery duplicate of a previous case If so, state name of vessel

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

The above heavy oil engine generator sets have been installed on board under special survey in accordance with plans approved by the Rules and the requirements contained in the Secretary's letters dated Eng. 13th August 1951 - 24th December 1951. The material used has been tested as required by the Rules and the workmanship is good. On completion the engine generator sets were tested in full working conditions in the shop and on board and found satisfactory.

The amount of Fee ... Kr. 1140⁰⁰
 Forgings Kr. 165⁰⁰
 Travelling Expenses (if any) £
 AIR RECEIVER Kr. 80⁰⁰
 When applied for 16/11 1953
 When received 19
 Committee's Minute
 Assigned
 FRIDAY 4 DEC 1953
 See minute on hull fl.

