

RECEIVED

pt. 497

D.O.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 114852

12 MAR 1947

Received at London Office 12 MAR 1947

Date of writing Report 19

When handed in at Local Office 19

12 MAR 1947

Port of LONDON

No. in Survey held at 69110

Date, First Survey 22. 10. 46

Last Survey 10. 12. 1946

Number of Visits THREE

eg. Book. 69110

Single or double acting

Screw vessel

T.W.M. Ascl Johnson

Tons Gross Net

built at Gothenburg

By whom built A. B. Gotaverken

Yard No. 39

When built 1925

owners Rederiaktiebolaget Nordstjernan

Port belonging to

ENGINE No. 46749

Contract No. 12053

When made 1946

Oil Engines made at Stamford Lines

By whom made Blackstone & Co Ltd

generators made at Dunsley, Glos

By whom made Trawdsley Ltd

Contract No.

When made 1946

No. of Sets 1

Engine Brake Horse Power 180

Nom. Horse Power as per Rule 45

Total Capacity of Generators 110 Kilowatts

OIL ENGINES, &c.—Type of Engines

Vertical latally inclined EPVMA5

2 or 4 stroke cycle 4

Single or double acting Single

Maximum pressure in cylinders 720 lbs

Diameter of cylinders 8 3/4"

Length of stroke 11 1/2"

No. of cylinders 5

No. of cranks 5

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 10"

Is there a bearing between each crank Yes

Revolutions per minute 600

Flywheel dia. 40"

Weight 18 Cwt

Means of ignition Compression

Kind of fuel used Fuel oil

Crank Shaft, dia. of journals as per Rule 5 3/4"

as fitted 5 3/4"

Crank pin dia. 5 3/4"

Crank Webs

Mid. length breadth 8"

Mid. length thickness 2 7/16"

Thickness parallel to axis Thickness round eye hole

Flywheel Shaft, diameter as per Rule 5 3/4"

as fitted 5 3/4"

Intermediate Shafts, diameter as per Rule

as fitted

Thickness of cylinder liners 19/32"

Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes

Means of lubrication Forced dry sump

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. One rotating

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size 2. 1

one pressure

one scavenge

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

Tramline type, drip proof compound wound

Pressure of supply 230 volts

Full Load Current

480

Amperes

Direct or Alternating Current

Direct

Is an alternating current system, state the periodicity

Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

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

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

and do the results comply with the requirements

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

PLANS.—Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

Yes

Receivers

Separate Tanks

SPARE GEAR

? Rule Spare Gear

1 Spare armature

1 Spare field coil

1 Set of bearings

1 Set of brushes

1 Set of brush holders

Plans in basement

The foregoing is a correct description,

J. B. Gundy

FOR BLACKSTONE & Co. LTD,

Manufacturer.



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Lloyd's Register Foundation

003162 00774-002



Dates of Survey while building { During progress of work in shops - - 22. 10. 46. 12. 11. 46. 10. 12. 46. pt. 4c.  
 During erection on board vessel - -  
 Total No. of visits. THREE (In Shops)  
 Dates of Examination of principal parts—Cylinders 22. 10. 46. Covers 22. 10. 46. Pistons 22. 10. 46. Piston rods.  
 Connecting rods. 22. 10. 46. Crank and Flywheel shafts. Intermediate shafts.  
 Crank shaft { Material B.S.S. 5005/204 Tensile strength 40/45 Ton sq in  
 Elongation 20% Identification Marks L.R. 34 266. 20. 10. 46.  
 Flywheel shaft, Material As above. Identification Marks.  
 Is this machinery duplicate of a previous case? Yes Identification Marks.  
 Identification marks on Air Receivers.

Is this machinery duplicate of a previous case? Yes If so, state name of vessel Axel Johnson. London Rpt.  
 GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This engine is of the Blackstone Co's standard design & has been built & tested under survey. The steel has been made at works approved by the Committee. The workmanship is good, and on completion the set was dispatched to Stockholm for fitting on board the vessel. When satisfactorily installed & tested will be eligible for the record of L.M.C. (with date). The torsional vibration characteristics of this engine have been approved — Letter of 10. 11. 47. for a service speed of 7600 R.P.M.

The amount of Fee ... £ 6 : 15 : 0 When applied for 12 MAR 1947  
 Travelling Expenses (if any) £ 1 : 0 : 0 When received 19  
 Committee's Minute  
 Assigned See Lot 15322  
 FRI. 13 JUN 1947

Im. 11. 42. T. (MADE AND PRINTED IN ENGLAND).  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)