

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 12103

MAR -8 1938

Received at London Office

Date of writing Report

19

When handed in at Local Office

Y. 3. 38

Port of

Belfast

No. in Survey held at Reg. Book.

Belfast

Date, First Survey

Please see 7 & 8. nch. report

Last Survey 3/3/35

19

Number of Visits

30386 on the Single
Twin
Triple
Quadruple

Screw vessel

In Sc. M.V. "MUNSTER"

Built at Belfast

By whom built

Harland & Wolff Ltd.

Yard No. 996

When built 1938

Owners

British & Irish Steam Packet Co 1936 Ltd.

Port belonging to

Liverpool

Oil Engines made at Belfast

By whom made

Harland & Wolff Ltd.

Contract No. 996

When made 1938

Generators made at Belfast

By whom made

Harland & Wolff Ltd.

Contract No. 996

When made 1938

No. of Sets 3

Engine Brake Horse Power 3 at 260

Nom. Horse Power as per Rule 223

Total Capacity of Generators 525 Kilowatts.

OIL ENGINES, &c.

Type of Engines

Harland & Wolff 2 cycle

2 stroke cycle

Single or double acting single

Maximum pressure in cylinders

800 lbs

Diameter of cylinders

220 7/8

Length of stroke

370 7/8

No. of cylinders

6

No. of cranks

6

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

304 7/8

Is there a bearing between each crank

Yes

Revolutions per minute

300

Flywheel dia.

1400 7/8

Weight

1846 Kgs

Means of ignition

Compression

Kind of fuel used

Diesel Oil

Crank Shaft, dia. of journals

as per Rule

180 7/8

Crank pin dia.

180 7/8

Crank Webs

Mid. length breadth

260 7/8

Thickness parallel to axis

Thickness around eye hole

Flywheel Shaft, diameter

as per Rule

as fitted

Intermediate Shafts, diameter

as per Rule

as fitted

Thickness of cylinder liners

17 7/8

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.

From main eng. supply

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

Yes

Lubricating Oil Pumps, No. and size

On engine

Air Compressors, No.

Yes

No. of stages

Yes

Diameters

Yes

Stroke

Yes

Driven by

Yes

Scavenging Air Pumps, No.

1 on engine

Yes

Diameter

Capacity 32 m³/min

Stroke

Yes

Driven by

Engine

AIR RECEIVERS:—

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

Manhole

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

Yes

High Pressure Air Receivers, No.

Yes

Cubic capacity of each

Yes

Internal diameter

Yes

Thickness

Yes

Seamless, lap welded or riveted longitudinal joint

Yes

Material

Yes

Range of tensile strength

Yes

Working pressure by Rules

Yes

Starting Air Receivers, No.

See Main Eng. opt

Yes

Total cubic capacity

Yes

Internal diameter

Yes

Thickness

Yes

Seamless, lap welded or riveted longitudinal joint

Yes

Material

Yes

Range of tensile strength

Yes

Working pressure by Rules

Yes

ELECTRIC GENERATORS:—

Type

Compound wound

Pressure of supply

220 volts

Load

790

Yes

Amperes

Direct or Alternating Current

DC

If alternating current system, state frequency of periods per second

Yes

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

Yes

Generators, do they comply with the requirements regarding rating

Yes

are they compound wound

Yes

are they over compounded 5 per cent.

Yes

, if not compound wound state distance between each generator

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

PLANS. Are approved plans forwarded herewith for Shafting

17-10-36

(If not, state date of approval)

Receiver

On ME opt.

Separate Tanks

On ME opt.

SHAFTING

SHAFTING

See Attached list

The foregoing is a correct description,

For HARLAND AND WOLFF, LIMITED.

A. G. Marshall

Manufacturer.

Secretary.



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W456-0092

Dates of Survey while building { During progress of work in shops - - }
 { During erection on board vessel - - - }
 Total No. of visits

Dates of Examination of principal parts—Cylinders *and* Covers *21.9.37 - 6.10.37* Pistons *21/9/37 - 2/2/38* Piston rods ✓

Connecting rods *1/10/37* Crank and Flywheel shaft *16/9/37 - 1/10/37* Intermediate shaft ✓

Crank and Flywheel shafts, Material *Steel* ✓ Identification Mark *LL0405 M°263* ✓

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case *Yes* ✓ If so, state name of vessel *M.V. LEINSTER Belmont 12030 3/11/37*

General Remarks (State quality of workmanship, opinions as to class, &c.)

These engines have been constructed to the Society's Rules under special survey. The materials & workmanship are good. They have been efficiently installed in the Auxiliary engine room & tried out under full working conditions with satisfactory results. ✓

The entablatures & bedplates were fabricated by electric welding process under special survey & to approved plans. ✓

C. H. H.

The amount of Fee ... £ :
Welded bedplate & entablatures 3 3
 Travelling Expenses (if any) £ :

When applied for,
 7. 3. 1938

When received,
 24.3.1938

25/3

Charles J. Hunter & R. Lee Amess
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI 11 MAR 1938*

Assigned *See other F.B. report*



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