

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1437

Received at London Office

Date of writing Report 19th July 1951 When handed in at Local Office

Port of HAMBURG

No. in Survey held at HAMBURG

Date, First Survey

Last Survey

19

pening Book.

Number of Visits

0933 on the Twin Screw vessel

"IRLAND"

Tons

Gross

Net

Built at Hamburg

By whom built Deutsche Werft A.G.

Yard No. 235

When built 1950

Machinery

Port belonging to

Engines made at Augsburg

By whom made Maschinenfabrik Augsburg-Nürnberg

Contract No.

When made 1950

Generators made at Hamburg

By whom made A. E. G.

Contract No.

When made 1950

No. of Sets One Engine Brake Horse Power 95

M.N. as per Rule 27

Total Capacity of Generators 55

Kilowatts.

Set intended for essential services

L ENGINES, &c.—Type of Engines M.A.N. Standard Type G 3 V 33

2 or 4 stroke cycle 4

Single or double acting S.A.

Maximum pressure in cylinders 52 atm.

Diameter of cylinders 220 mm

Length of stroke 330 mm

No. of cylinders 3

No. of cranks 3

Minimum indicated pressure 7 atm. Firing order in cylinders 1-3-2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 260 mm

Is there a bearing between each crank yes

Moment of inertia of flywheel (16 m² or Kg.-cm.²) 2200 kg/m²

Revolutions per minute 400

Flywheel dia 1200 mm

Weight 2360 kg

Means of ignition Compression

Kind of fuel used Diesel

Crank Shaft, dia. of journals

as per Rule as approved

as fitted 130 mm

Crank pin dia 130 mm

Crank Webs

Mid. length breadth 240 mm

Thickness parallel to axis

Mid. length thickness 61

Thickness round eyehole

Flywheel Shaft, diameter

as per Rule

Intermediate Shafts, diameter

as per Rule

General armature, moment of inertia (16 m² or Kg.-cm.²)

Means provided to prevent racing of the engine when declutched yes

Means of lubrication forced

Kind of damper if fitted none

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 - 2.5 T.P.H.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel no

Lubricating Oil Pumps, No. and size 1 - 1.1 T.P.H.

Air Compressors, No. One

No. of stages two

Diameters 250 and 100 mm

Stroke 200

Driven by clutch

Sucking Air Pumps, No.

Diameter

Stroke

Driven by

RECEIVERS:—Have they been made under Survey yes

State No. of Report or Certificate 352/3

Each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Are the internal surfaces of the receivers be examined yes

What means are provided for cleaning their inner surfaces free access

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

Pressure Air Receivers, No. none

Cubic capacity of each

Internal diameter

thickness

Are the receivers lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Sucking Air Receivers, No. 352 & 353

Total cubic capacity each 10 m³

Internal diameter 1750 mm

thickness 24.5 mm

Are the receivers lap welded or riveted longitudinal joint Riveted

Material S.M. Steel

Range of tensile strength 42.7/44 kgs

Working pressure by Rules Appd.

ELECTRIC GENERATORS:—Type A.E.G. Spray water proof, Ventilated, Type AW 105

Voltage of supply 110 volts

Full Load Current 478

Amperes

Direct or Alternating Current

Direct

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

Are the generators under 100 kw. full load rating, have the makers supplied certificates of test yes

and do the results comply with the requirements yes

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

List of driven machinery other than generator Clutch driven air compressor

Are approved plans forwarded herewith for Shafting

Receivers

Separate Tanks

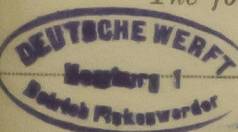
Torsional Vibration characteristics if applicable been approved not applicable

Armature shaft Drawing No.

Are the generators to Rule Requirements

The foregoing is a correct description,

Manufacturer.



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003421-003428-0063

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 Covers Pistons Piston rods

Connecting rods Crank and Flywheel shafts Intermediate shafts

Crank shaft { Material Tensile strength
Elongation Identification Marks

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers No. 352 9.10.50 W.F.C.
No. 353 9.10.50 W.F.C.

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.) This generator engine has been built under Special Survey. Augsburg Report No. 41. Properly installed on board the vessel, full load, overload, full speed and overspeed running and governor trials have been completed with good results.

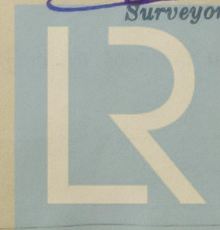
The amount of Fee 1/3 F.E. 4. 12. 0
1/3 F.E. 4. 0. 0 When applied for 19
Travelling Expenses (if any) £ - : - : - When received 19

Committee's Minute

Assigned

TUES. 14 AUG 1951

See F.E. mch. rpt.



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