

4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1528

28 AUG 1953

Received at London Office

7. MAY 1953

Port of Kobe

Writing Report 10-4-1953

When handed in at Local Office

Survey held at Tamano, Japan

Date, First Survey 21-5-1952

Last Survey 3-4-1953

Number of Visits 34

on the Single Twin Triple Quadruple Screw vessel

M.V. "ASASHIO MARU"

Tons { Gross 7524.07
Net 4184.98

at Tamano, Japan

By whom built Mitsui Shipbuilding & Engineering Co., Ltd Yard No. 575

When built April 53

by Nakamura Steam Ship Co., Ltd

Port belonging to Kobe

Engines made at Tamano, Japan

By whom made Mitsui S.B. & E. Co., Ltd

Engine No. 479480, 481

When made April 53

Generators made at Yokohama, Japan

By whom made Fuji Electric M.F.G. Co., Ltd

Generator No. 31842A
31843A
31844A

When made April 53

of Sets 3

B.H.P. of each Set 270

M.N. of each Set as per Rule 67.5

Capacity of each Generator 180

Kilowatts

not intended for essential services yes

ENGINES, &c.—Type of Engines B & W 525 MTH 40 2 or 4 stroke cycle 2A Single or double acting Single

Maximum pressure in cylinders 55 kg/cm² Diameter of cylinders 245 mm Length of stroke 400 mm No. of cylinders 5 No. of cranks 5

Minimum indicated pressure 7.5 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 315 mm

Is there a bearing between each crank yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 8292.500 Revolutions per minute 450

Wheel dia. 1350 mm Weight 3030 Kgs Means of ignition Compression Kind of fuel used Diesel oil

Crank Shaft, { Solid forged dia. of journals as per Rule 151.12 mm Crank pin dia 170 mm Crank Webs Mid. length breadth 290 mm Thickness parallel to axis 90 mm
Semi-built dia. of journals as fitted 170 mm Mid. length thickness 90 mm Thickness round eyelets 82.5 mm
All-built

Wheel Shaft, diameter as per Rule — Generator armature, moment of inertia (16 m² or Kg.-cm.²) 895000

Means provided to prevent racing of the engine yes Means of lubrication Forced Kind of damper if fitted —

Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

Boiling Water Pumps, No. and how driven 2, Electric motor Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Lubricating Oil Pumps, No. and size 1, Gear pump per each engine; Particulars of gear Breadth 75 mm, Module 6, No. of teeth 15, R.P.M 450

Compressors, No. — No. of stages — Diameters — Stroke — Driven by —

Exhausting Air Pumps or Blowers, No. — How driven —

RECEIVERS:—Have they been made under Survey yes State No. of Report or Certificate AR-14159

Give full details of safety devices 1 Spring loaded safety valve.

Are the internal surfaces of the receivers be examined and cleaned yes

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 —

Unless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

Working Air Receivers, No. 1 Total cubic capacity 0.1 m³ Internal diameter 420 mm thickness 11 mm

Unless, lap welded or riveted longitudinal joint Welded Material O.H. Steel Range of tensile strength 26~29 T Working pressure 25 kg/cm²

ELECTRIC GENERATORS:—Type Self ventilated, Semi-enclosed, Drip proof type

Pressure of supply 225 volts. Full Load Current 800A Amperes. Direct or Alternating Current Direct

Is the 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

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 yes

Details of driven machinery other than generator NONE

PLANS.—Are approved plans forwarded herewith for Shafting 12-1-53 Receivers 2-11-52 Separate Tanks 4-2-53

Do the Torsional Vibration characteristics if applicable been approved 12-1-53 Armature shaft Drawing No. 3D-3638

Are the spare gear required by the Rules been supplied 5 Exhaust valves, 5 air inlet valves, 2 Starting air valves,

5 Fuel valves, 3 Safety valves, 6 sets piston rings, 1 set crank pin bearings, 1 Gudgeon pin

bush, 2 Fuel pumps complete, 3 sets Fuel pipes, 1 Cylinder, 1 Piston, 4 Indicator valves,

2 sets main bearings.

The foregoing is a correct description,
MITSUI SHIPBUILDING & ENGINEERING CO., LTD., TAMANO WORKS.

Manufacturer.

S. Tanaka
Senior Managing Director.

013728 - 013734 - 0159



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1952- MAY. 21. 30. JUN. 20. 27. JUL. 8. 22. AUG. 12. 21. 29. SEP. 4. 9. 12. 19. 29. OCT. 15. 22.
 During progress of work in shops - - - NOV. 17. 21. 25. 28 DEC. 2. 5. 6. 13. 16. 19. 21. 23. 29
 1953- JAN. 31 FEB. 7
 During erection on board vessel - - - 1953- MAR. 24 APR. 2. 3
 Total No. of visits 34

Dates of Examination of principal parts—Cylinders 19-12-52 Covers - Pistons 23-12-52 Piston rods -

Connecting rods 2-12-52 Crank and Flywheel shafts 5-12-52 Intermediate shafts -

Crank shaft	Material	Arm	Electric Furnace Steel			Tensile strength	ENg. NO. 479 J ₆ 480 J ₆		
	Elongation	JOURNAL	31~34%	31~34%	33~35%	ARM	28.0~30.6	28.3~30.8	29.0~32.5
		ARM	29-34	29-35	31-35	Identification Marks	M-CK 338	M-CK 339	M

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers No. AR 459 LLOYD'S TEST W.P 41 kg/cm² W.P 25 kg/cm² MHR 7-2-52

Is this machinery duplicate of a previous case yes If so, state name of vessel M.V. "KENYO MARU"

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

The Electric Generator sets of this vessel have been constructed under Special Survey in accordance with the Rules, approved plans and Secretary's letters.
 Materials and the workmanship are sound and good.
 The Electric generator sets have been examined during deck and comprehensive sea trials and found satisfactory.

4m.52-T. (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ 1,230.00 When applied for 13. AUG 1953
 Travelling Expenses (if any) £ : : When received 19

Committee's Minute TUESDAY 22 SEP 1953
 Assigned See Rpt. 4/6

