

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1238

Received at London Office

MAR 1948

Date of writing Report Dec. 11, 1947 When handed in at Local Office 19 Port of Cleveland, Ohio.  
 No. in Survey held at Cleveland, Ohio. Date, First Survey Jan. 29th, Last Survey April 23rd, 1947.  
 Reg. Book. Number of Visits 10

Single  
on the Twin  
Triple  
Quadruple } Screw vessel Ming Sung Industrial Co. Ltd. Order No. 1109  
 (160' Yangtze River Freight & Passenger Vessels) Tons { Gross -  
 Net -

Built at - By whom built - Yard No. - When built -

Owners - Port belonging to -

Oil Engines made at Cleveland, Ohio By whom made General Motors Corp., Engine  
Cleve. Diesel Engine Div. XXXX Contract No. 22644 When made 1947

Generators made at Milwaukee, Wis. By whom made Allis-Chalmers Mfg. Co. Contract No. 142850 When made 1943

No. of Sets One Engine Brake Horse Power 150 Nom. Horse Power as per Rule - Total Capacity of Generators 100 Kilowatts.

OIL ENGINES, &c.—Type of Engines Auxiliary Diesel ☒ 2 or 4 stroke cycle 2 Single or double acting Single  
 .E.P. 95 lbs. per sq. in. 1100 lbs. Diameter of cylinders 6-1/2" Length of stroke 7" No. of cylinders 3 No. of cranks 3  
 Maximum pressure in cylinders 1100 lbs. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6.630" Is there a bearing between each crank Yes  
 Revolutions per minute 1200 Flywheel dia. 25.625" Weight 34 lbs. Means of ignition Solid Injection Kind of fuel used Heavy Oil  
 Crank Shaft, dia. of journals as per Rule - Crank pin dia. 4-1/2" Crank Webs Mid. length breadth 7-1/2" Thickness parallel to axis -  
as fitted 5" Mid. length thickness 1.62" Thickness around eyehole -  
 Flywheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as fitted - Thickness of cylinder liners 1" at Comb. Space  
as fitted -

Is a governor or other arrangement fitted to prevent racing of the engine when decked Yes Means of lubrication Forced Feed

Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -

Cooling Water Pumps, No. Two Is the sea suction provided with an efficient strainer which can be cleared within the vessel -  
 (1) Fresh Water 50 GPM @ 30 lbs. per sq. in. ✓

Lubricating Oil Pumps, No. and size One 20 GPM @ 60 lbs. per sq. in. Positive Gear Type

Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Scavenging Air Pumps, No. One 640 CFM @ 3 lbs. per sq. in. Diameter - Stroke Rotary Driven by Gears Main Engine

AIR RECEIVERS:—Have they been made under Survey No 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 M.C.W. 3 Wire Shunt Round

Pressure of supply 120/240 volts. Full Load Current 417 Amperes. Direct or Alternating Current Direct

If alternating current system, state the periodicity - Has the Automatic Governor been tested and found as per rule when full load is suddenly thrown on and off Yes Generators, are they compounded as per rule stab shunt 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 If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test Yes and do the results comply with the requirements Yes If the generators are 100 kw. or over have they been

built and tested under survey Not built under survey.

PLANS. Are approved plans forwarded herewith for Shafting - Receivers - Separate Tanks -  
 (If not, state date of approval)

SHAFTING. To Rule Requirements. See list attached.

The foregoing is a correct description,

Manufacturer.



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Dates of Survey while building { During progress of work in shops -- Jan. 29; Feb. 3, 4, 5, 6, 8, 18; March 12; April 4, 23, 1947. All engines on this order were manufactured on a mass-production system. Dates indicate visits to the works up to and including final inspection.  
During erection on board vessel ---  
Total No. of visits 10

Dates of Examination of principal parts—Cylinders 1/29-4/23, 47 Covers 1/29-4/23, 47 Pistons 1/29-4/23, 47 Piston rods -  
Connecting rods 1/29-4/23, 47 Crank and Flywheel shafts 1/29-4/23, 47 Intermediate shafts -  
Crank and Flywheel shafts, Material Forged Steel Identification Marks LLOYDS 10/31/46 6408  
Intermediate shafts, Material - Identification Marks -  
Identification marks on Air Receivers -

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 Diesel Engine was constructed under Special Survey in accordance with the Rules and approved plans, also to the Rule requirements of the American Bureau of Shipping.

The Generator, stated to have been built and tested to United States Navy requirements, was visually examined, as far as practicable before being coupled direct to the Diesel engine. The Diesel Generating unit was tested under full and intermediate loads, 10% overload, also under governor control, in the presence of the undersigned, with satisfactory results.

Attached to this report are the following: Armature shaft test record, Generator temperature test report 7b and makers test certificate for Generator.

For identification purposes the Generator and Engine were stamped: LLOYDS 22644 4/23/47.

TO BE CREDITED TO CLEVELAND

The amount of Fee \$75.00

Travelling Expenses (if any) \$7.50

When applied for, 18.3 19 49  
When received, 19

Bloomfield for G Drummond  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute MON. 11 APR 1948

Assigned

All minute on file



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