

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 13294 ✓

Motor for 30 K.W. generator

Received at London Office

Date of writing Report *21st Oct. 1941* When handed in at Local Office *19* Port of *Sathenburg*
No. in Survey held at *LYSEKIL* Date, First Survey *22nd Oct.* Last Survey *✓* 19 *41*
Reg. Book. Number of Visits *1*

Single
on the Twin } Screw vessel
Triple }
Quadruple }

Built at *STOCKHOLM* By whom built *A.B. EKENSBEITGS VARV* Yard No. *-* When built

Owners Port belonging to

Oil Engines made at *LYSEKIL* By whom made *SKANDIA-VERKEN A.B.* Contract No. *221099* When made *1941*

Generators made at By whom made Contract No. When made

No. of Sets *1* Engine Brake Horse Power *50* Nom. Horse Power as per Rule *17* Total Capacity of Generators *50* Kilowatts.

OIL ENGINES, &c.—Type of Engines *Heavy oil engine* 2 or 4 stroke cycle *2SC* Single or double acting *SD*

Maximum pressure in cylinders *20 kg/cm²* Diameter of cylinders *190 mm* Length of stroke *180 mm* No. of cylinders *2* No. of cranks *2*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *472* Is there a bearing between each crank *✓*

Revolutions per minute *800* Flywheel dia. *800 mm* Weight *260 kg.* Means of ignition *hot bulb.* Kind of fuel used *heavy oil*

Crank Shaft, dia. of journals *Approved 90 mm* as fitted *90 mm* Crank pin dia. *90 mm* Crank Webs Mid. length breadth *124 mm* Thickness parallel to axis *-* as fitted *90 mm* Mid. length thickness *48 mm* shrunk Thickness around eyehole *-*

Flywheel Shaft, diameter as per Rule *-* as fitted *-* Intermediate Shafts, diameter as per Rule *-* as fitted *-* Thickness of cylinder liners *18 mm*

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 *Water cooled*

Cooling Water Pumps, No. *One* Is the sea suction provided with an efficient strainer which can be cleared within the vessel *✓*

Lubricating Oil Pumps, No. and size *One adjustable automatic lubricator*

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 *Yes* State No. of Report or Certificate *Cont. attached*

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 *Steam & soda*

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 *-*

Seamless, lap welded or riveted longitudinal joint *-* Material *-* Range of tensile strength *-* Working pressure by Rules *-*

Starting Air Receivers, No. *One* Total cubic capacity *70 lit.* Internal diameter *200 mm* thickness *6 mm*

Seamless, lap welded or riveted longitudinal joint *Welded* Material *st. steel* Range of tensile strength *40-55 kg/cm²* Working pressure by Rules *45 kg/cm²*

ELECTRIC GENERATORS:—Type *-*

Pressure of supply *-* volts. Full Load Current *-* Amperes. Direct or Alternating Current *-*

If alternating current system, state the periodicity *-* Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off *-*

Generators, are they compounded as per rule *-* is an adjustable regulating resistance fitted in series with each shunt field *-*

Are all terminals accessible, clearly marked, and furnished with sockets *-*

Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched *-* Are the lubricating arrangements of the generators as per Rule *-*

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test *-* and do the results comply with the requirements *-*

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

PLANS. Are approved plans forwarded herewith for Shafting *20.7.41* Receivers *9.7.40* Separate Tanks *-*
(If not, state date of approval)

SPARE GEAR *As per Rules supplied*

No air receivers fitted.

The foregoing is a correct description,
SKANDIA-VERKEN, A. B.
Fredrik Andersson Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 20.10.41
 { During erection on board vessel - - - }
 Total No. of visits

Dates of Examination of principal parts—Cylinders 20.10.41 Covers 20.10.41 Pistons 20.10.41 Piston rods —

Connecting rods 20.10.41 Crank and Flywheel shafts 13/8 & 20/10 41 Intermediate shafts —

Crank and Flywheel shafts, Material S.S. steel Identification Marks LLOYD'S
 NE 957
 SJ. 13. 8. 41

Intermediate shafts, Material — Identification Marks —

Identification marks on Air Receivers NE 688
 LLOYD'S TEST 40 154.
 W.P. 20. 11. 41.
 S.P. 20. 9. 41

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.) This engine has been built under Special Survey and all the requirements of the Rules have been complied with. The shafting as per forging report attached. The workmanship is good and the material fulfils the requirements of the Rules. The dimensions are as specified and in accordance with the Rules and approved plans. The engine has been tested under full working power on the test bed and found to work satisfactorily.

1m.11.37.—Transfer. (MADE IN ENGLAND.)
 (The Surveys are requested not to be done below the space for Committee Minute.)

The amount of Fee ...	2 lbs. 5/00	When applied for,
Travelling Expenses (if any)	17/60	When received,
		19.....

Stan Jansson
 Surveyor to Lloyd's Register of Shipping.



Committee's Minute
 Assigned