

REPORT ON OIL ENGINE MACHINERY.

No. 2922.

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REMARKS. Writing Report 3.3. 1928 When handed in at Local Office 19 Port of Stockholm
Sickla, Skm. Distr. Date, First Survey 27.5.27. Last Survey 24.2. 1928.
Number of Visits 6.
Survey held at Gothenburg on the Twin Screw vessels "NIKE"
at Gothenburg By whom built Aktieb. Götaverken Yard No. 413 When built 1928
By whom made Aktieb. Atlas-Diesel Engine No. 30182 When made 1928
Boilers made at Gothenburg By whom made AB. Lindholmens Motall Boiler No. 19409 When made 1928
Horse Power 100 Owners Rederiaktieb. Transoil Port belonging to Gothenburg
Horse Power as per Rule 46 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

ENGINES, &c.—Type of Engines Stationary Diesel Oil Engine, 2 stroke cycle Single acting
No. of cylinders 2 Diameter of cylinders 290 mm. No. of cranks 2 Length of stroke 410 mm.
Mean pressure in cylinders 35 Kg/cm² Flywheel dia. 1400 mm. Weight 1185 Kg. Means of ignition compression Kind of fuel used Crude Oil
Revolutions per minute 275 Crank pin dia. 195 mm. Crank Webs Mid. length breadth 260 mm. Thickness parallel to axis
Shaft, dia. of journals 200 mm. Thrust Shaft, diameter at collars as fitted
Flywheel is fitted on the crank shaft. Intermediate Shafts, diameter as fitted
Screw Shaft, diameter as fitted Is the tube screw shaft fitted with a continuous liner
Liners, thickness in way of bushes as fitted Thickness between bushes as fitted Is the after end of the liner made watertight in the
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
Liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive
Liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after
Length of Bearing in Stern Bush next to and supporting propeller
Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet
Means of lubrication
Is a governor fitted to prevent racing of the engine when de-clutched yes
Are the exhaust pipes and silencers water cooled or lagged with
Thickness of cylinder liners none fitted Are the cylinders fitted with safety valves yes
ducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Water Pumps, No. 1 Can one be overhauled while the other is at work
Pumps fitted to the Main Engines, No. Diameter Stroke
s connected to the Main Bilge Line No. and Size How driven
Lubricating Oil Pumps, including Spare Pump, No. and size
Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
independent means arranged for circulating water through the Oil Cooler
No. and size:—In Engine and Boiler Room
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size
Are the Bilge Suctions in the Machinery Space
the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes
Are they fitted with Valves or Cocks
easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
Are the Overboard Discharges above or below the deep water line
Sea Connections fitted direct on the skin of the ship platform plates
Are the Blow Off Cocks fitted with a spigot and brass covering plate
fixed sufficiently high on the ship's side to be seen without lifting the platform plates
How are they protected
each fitted with a Discharge Valve always accessible on the plating of the vessel
Have they been tested as per Rule
pass through the bunkers
pass through the deep tanks
Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
Is it fitted with a watertight door worked from
arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one
ment to another Is the Shaft Tunnel watertight
Is it fitted with a watertight door worked from
vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Air Compressors, No. none fitted on this engine No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
aging Air Pumps, No. Diameter Stroke
ary Engines crank shafts, diameter as per Rule as fitted
RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
Internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces mudhole 120 mm.
a drain arrangement fitted at the lowest part of each receiver yes
Pressure Air Receivers, No. none fitted solid internal cubic capacity of each Internal diameter thickness
s, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules
ng Air Receivers, No. 1 Total cubic capacity 100 litres Internal diameter 340 mm. thickness 15 mm.
s, lap welded or riveted longitudinal joint lap welded Material SM Steel Range of tensile strength 38 Kg/mm² Working pressure by Rules 51 Kg/cm²

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	24.2.28.	35 Kg/cm ²	80 Kg/cm ²	Lloyd's Test 80 Kg. A.I. 24.2.28. A	
COVERS	24.2.28.	/Cover is in one piece with the cylinder/			
JACKETS	24.2.28.		4 Kg/cm ²		
PISTON WATER PASSAGES	/Open pistons/				
MAIN COMPRESSORS—1st STAGE	None fitted				
2nd					
3rd					
AIR RECEIVERS—STARTING	9.2.28.	50 Kg/cm ²	100 Kg/cm ²	N:o 5591 Lloyd's Test 100 Kg. W.P. 50 Kg. A.I. 9.2.28. A	
INJECTION					
AIR PIPES	24.2.28.	300 Kg/cm ²	600 Kg/cm ²		
FUEL PIPES	24.2.28.	300 "	600 "	A	
FUEL PUMPS					
SILENCER					
WATER JACKET					
SEPARATE FUEL TANKS					

See Secretary's letter

PLANS. Are approved plans forwarded herewith for Shafting E. 28.5.25. Receivers E. 25.10.26. Separate Tanks

Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR as per list, approved on the 4th Febr. 1926, will be inspected when machinery is being fitted in ship.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 27/5, 15/10, 21/11 1927, 4, 9 & 24/2 1928.
During erection on board vessel - -
Total No. of visits in shop 6

Dates of Examination of principal parts—Cylinders with Covers $\frac{4 \cdot 24}{2}$ 28 Pistons $\frac{24}{2}$ 28 Rods ✓ Connecting rods $\frac{27 \cdot 21}{5 \cdot 11}$ 28

Crank shaft $\frac{15}{10}$ 27, $\frac{24}{2}$ 28 Flywheel shaft ✓ Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of mopping arrangements Engines tried under working conditions in shop 4

Crank shaft, Material S.M. Steel Identification Mark Lloyd's N:o 9013 C.S. 15.10.27-A Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case yes If so, state name of vessel See Skm. Report no. 2695

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

I am of opinion that this engine is of superior material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit that it be approved as auxiliary to a classed main engine.

The amount of Entry Fee ... £ : : When applied for, 2.3. 1928.
Special survey in Er. 218:40: shop
Donkey Boiler Fee ... £ : : When received, 31.3 28
Travelling Expenses (if any) Er. 28:50:
Total Er. 246:90

Committee's Minute

TUE. 27 NOV 1928

Assigned see Minute on Got. Rpt

7328 attached

A. Bakson
Engineer Surveyor to Lloyd's Register of Shipping
Assisted by Mr. K.J. Andersson



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Foundation