

REPORT ON OIL ENGINE MACHINERY.

No. 11091.

24.1.40.

Received at London Office

Date of writing Report 14th January 1940 When handed in at Local Office 10 Port of Copenhagen
No. in Survey held at Copenhagen & Askov Date, First Survey 26th January 39 Last Survey 4th January 1940
eg. Book. Number of Visits 67

on the Single Screw vessel Motor Trawler "SATURNUS" Tons Gross 9964.73
Twin Net 5817.86
Triple
Quadruple

built at Askov By whom built of Askov Skibsverft Yard No. 91 When built 1940
apt. Burmeister & Wain

Engines made at Copenhagen By whom made askov Skibsverft Engine No. 3000 When made 1940
Belting in connection of the skibbyggers

Donkey Boilers made at Aalborg By whom made of Aalborg Verft Boiler No. 403-04 When made 1940

Brake Horse Power 5500 Owners Rederi A/S Saturnus Port belonging to Stockholm
Emmanuel Sjögberg

Net Horse Power as per Rule 1030 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended carrying Petroleum in Bulk. Ocean going

ENGINES, &c. Type of Engines Vertical Diesel engine cross head type Solid injection 2 or 4 stroke cycle 2 Single or double acting double
Maximum pressure in cylinders 49 kg/cm² Diameter of cylinders 620 mm Length of stroke 1400 mm No. of cylinders 5 No. of cranks 5
Indicated Pressure 6.4 kg/cm²

Number of bearings, adjacent to the Crank, measured from inner edge to inner edge 1164 mm Is there a bearing between each crank yes
Revolutions per minute 108 Means of ignition compression Kind of fuel used Crude oil

Journal shaft, Solid forged as per Rule 495 mm Crank pin dia. 485 mm Crank Webs Mid. length breadth 1040 mm Thickness parallel to axis 250 mm
Semi built dia. of journals as fitted 485 mm 115 mm central hole Mid. length thickness 250 mm Thickness around eye hole 272.5 mm
All built

Intermediate Shafts, diameter as per Rule 382 mm Thrust Shaft, diameter at collars as per Rule 460 mm
as fitted 115 mm central hole

Screw Shaft, diameter as per Rule 422 mm at top of cone Is the screw shaft fitted with a continuous liner yes
as fitted 405 mm at propeller

Brass Liners, thickness in way of bushes as per Rule 22 mm Thickness between bushes as per Rule 17 mm Is the after end of the liner made watertight in the
as fitted as fitted

Propeller boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner yes
the 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 yes

Two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after end of the tube
yes Length of Bearing in Stern Bush next to and supporting propeller 1915 mm

Propeller, dia. 5600 mm Pitch various No. of blades 4 Material Brass whether Moveable no Total Developed Surface 132 sq. feet
2/3 D

Method of reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication
yes Thickness of cylinder liners 42 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine to pumps

Boiling Water Pumps, No. 2 off 100 mm Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
1 off 100 mm

Bilge Pumps worked from the Main Engines, No. 2 Diameter 160 mm Stroke 240 mm Can one be overhauled while the other is at work yes
2 engine bilge pumps, 1 boiler pump 150 mm, 1 bilge cleaning pump 220 mm

Pumps connected to the Main Bilge Line No. and Size 2 engine bilge pumps, 1 boiler pump 150 mm, 1 bilge cleaning pump 220 mm
How driven chain engine, steam, electrically

Is the cooling water led to the bilges overboard If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
arrangements yes

Oil Pumps, No. and size 1 off 150 mm Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 off 230 mm each
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces 2 off 3 1/2" - 1 off 3" - 1 off 2 1/2" - 1 off 2 1/2" from oil pump room, 2 off 2" from bilge platform, 1 off 4" - 2 off 2"
In Pump Room 1 off 4"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 off 7" - 2 off 4" - 1 off 3 1/2"
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces
from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line above below

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
What pipes pass through the bunkers none How are they protected no

What pipes pass through the deep tanks none Have they been tested as per Rule no
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Is the 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
compartment to another yes Is the Shaft Tunnel watertight no Is it fitted with a watertight door no worked from no

Is a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork no
Main Air Compressors, No. 1 No. of stages 1 Diameters 400 mm Stroke 190 mm Driven by air engine
486

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 250 mm (280-250) Stroke 190 mm Driven by air engine
190

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 106 mm Stroke 34 mm Driven by Steam

What provision is made for first Charging the Air Receivers Two steam driven emergency air compressors
Suctioning Air Pumps, No. 2 off 2 x Diameter 265 mm³/minute Driven by chain engine
7/1, 25/10, 28/12

Auxiliary Engines crank shafts, diameter as per Rule 130 mm No. 2 Position In the engine room - P.S. side from line
as fitted 150 mm Have the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes



