

REPORT ON OIL ENGINE MACHINERY.

No. 18263

Received at London Office

19 MAY 1952

Report 3 May 1952 When handed in at Local Office 1952 Port of Amsterdam
Survey held at Amsterdam Date, First Survey 28 Feb 1951 Last Survey 1st of May 1952
Number of Visits 19
by Single Act in the Twin Triple Quadruple Screw vessel M.V. 'BLEKOK'
by Self-propelled By whom built Nissterm Yard No 243 When built 1952
by Act at Amsterdam By whom made Weekspeer N.Y. Engine No 1334 When made 1952
Boiler No. When made
Power 430 Owners Port belonging to
as per Rule 86 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Types, &c. — Type of Engines T.M.A.S. 176 2 or 4 stroke cycle 4 Single or double acting Single
Pressure in cylinders 5069 mm^2 Diameter of cylinders 270 mm Length of stroke 500 mm No. of cylinders 6 No. of cranks 6
Rated Pressure 7569 mm^2 Ahead Firing Order in Cylinders 1-3-5-6-4-2 Span of bearings, adjacent to the crank, measured
edge to inner edge 320 mm Is there a bearing between each crank Yes Revolutions per minute 375
Weight 1850 kg Moment of inertia of flywheel (lbs. in² or Kg. cm.²) 2.57 $\times 10^6$ Means of ignition Comp. Kind of fuel used Diesel Oil
dia. of journals as per Rule as fitted 100 mm Crank pin dia. 100 mm Crank webs Mid. length breadth 340 mm Thickness parallel to axis
Mid. length thickness 83 mm shrunk Thickness around eyehole

Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 190 mm Thrust Shaft, diameter at collars as per Rule as fitted 145 mm
Screw Shaft, diameter as per Rule as fitted 177.5 mm Is the (tube screw) shaft fitted with a continuous liner Yes
Bushes, thickness in way of bushes as per Rule as fitted 14 mm Thickness between bushes as per Rule as fitted 11 mm Is the after end of the liner made watertight in the
Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length
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-
If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after
shaft If so, state type Length of bearing in Stern Bush next to and supporting propeller 800 mm

Propeller, diameter Pitch No. of blades Material whether moveable Total developed surface sq. feet
Inertia of propeller (lbs. in² or Kg. cm.²) Kind of damper, if fitted
Reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of
lock forced Thickness of cylinder liners 11 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
with non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
engine Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel
worked from the Main Engines, No. 1 Diameter 130 mm Stroke 75 mm Can one be overhauled while the other is at work

Connected to the Main Bilge Line { No. and size How driven
If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
Pumps, No. and size Power Driven Lubricating Oil Pumps, including spare pump, No. and size
Independent means arranged for circulating water through the Oil Cooler Suctions, connected to both main bilge pumps and auxiliary
, No. and size:—In machinery spaces In pump room

Power Pump Direct Suctions to the engine room bilges, No. and size
Bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction in the machinery spaces led from easily
strum-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed
high on the ship's side to be seen without lifting the platform plates Are the overboard discharges above or below the deep water line
Are they fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate
How are they protected
pass through the bunkers Have they been tested as per Rule
pass through the deep tanks
cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times
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
from one compartment 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

Compressors, No. 1 No. of stages 1 diameters 100/120 mm stroke 90 mm driven by M. engine
Air Compressors, No. No. of stages diameters stroke driven by
Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
Arrangement is made for first charging the air receivers
Air Pumps, No. diameter stroke driven by
Engines crank shafts, diameter as per Rule as fitted No. Position
Auxiliary engines been constructed under special survey Is a report sent herewith

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13/6/52

AIR RECEIVERS:—Have they been made under survey *Yes* State No. of report or certificate *C 9595*
 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 and cleaned *Yes* Is a drain fitted at the lowest part of each receiver *Yes*
 Injection Air Receivers, No. *—* Cubic capacity of each *—* Internal diameter *—* thickness *—*
 Seamless, welded or riveted longitudinal joint *—* Material *—* Range of tensile strength *—* Working pressure *—*
 Starting Air Receivers, No. *2* Total cubic capacity *1800 liters* Internal diameter *496 mm* thickness *9.5 mm*
 Seamless, welded or riveted longitudinal joint *Seamless* Material *Stn. Steel* Range of tensile strength *604-628 kg/cm²* Working pressure *—*

IS A DONKEY BOILER FITTED *—* If so, is a report now forwarded *—*
 Is the donkey boiler intended to be used for domestic purposes only *—*
PLANS. Are approved plans forwarded herewith for shafting *10-3-52* Receivers *10-3-52* Separate fuel *—*
 (If not, state date of approval)
 Donkey boilers *—* General pumping arrangements *—* Pumping arrangements in machinery space *—*
 Oil fuel burning arrangements *—*
 Have Torsional Vibration characteristics been approved *Yes* Date of approval *10-3-52*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *—*
 State the principal additional spare gear supplied *—*
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The foregoing is a correct description, *WERKSPOR N.V.* Manufacturer.

Dates of Survey while building
 During progress of work in shops - - *1951, Feb 20, March 1-6-8-9-12-15, April 6, May 22, Sept 14*
 During erection on board vessel - - *Oct 11, 1952, March 14-19-24, April 1, May 1-2*
 Total No. of visits *19*

Dates of examination of principal parts—Cylinders *March 5-7* Covers *9-3-51* Pistons *6-4-51* Rods *—* Connecting rods *—*
 Crank shaft *11-3-51* Flywheel shaft *—* Thrust shaft *2-5-52* Intermediate shafts *1-5-52* Tube shaft *—*
 Screw shaft *1-5-52* Propeller *1-5-52* Stern tube *14-3-52* Engine seatings *—* Engine holding down bolts *—*
 Completion of fitting sea connections *—* Completion of pumping arrangements *—* Engines tried under working conditions *—*
 Crank shaft, material *Stn. Steel* Identification mark *LLOYD'S No 13889* Flywheel shaft, material *—* Identification mark *—*
 Thrust shaft, material *Stn. Steel* Identification mark *LLOYD'S No 8987* Intermediate shafts, material *Stn. Steel* Identification mark *LLOYD'S*
 Tube shaft, material *—* Identification mark *—* Screw shaft, material *Stn. Steel* Identification mark *LLOYD'S*
 Identification marks on air receivers *No 906065-7 LLOYD'S TEST 60kg/cm² W.P. 30kg/cm² R.R. 15-4-49.*

Welded receivers, state Makers' Name *—*
 Is the flash point of the oil to be used over 150°F *—*
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *—*
 Description of fire extinguishing apparatus fitted *—*
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *—* If so, have the requirements of the Rules been complied with *—*
 If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with *—*
 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 in accordance with approved plan and Society's rules. Tested as required and workmanship found good. The engine has been tested on Matus test bench under full load condition and found satisfactory. The engine has been shipped to Delfzijl. (Groningen district). In my opinion the vessel for which this engine is intended will be eligible for the notation of * L.M.C. (with date) when the whole machinery has been fitted satisfactory on board and tried under working condition. Copy Certificates of Crank, Thrust, Int. Shaft and Air receivers attached.*

The amount of Entry Fee ... £ *321.00*
 Special ... £ : : When applied for *13.5* *19.52*
 Donkey Boiler Fee... £ : : When received *19*
 Travelling Expenses (if any) £ *16.00*
 Engineer Surveyor *Mr. Kuyper* Lloyd's Register

Committee's Minute *TUES. 14 OCT 1952*
 Assigned *See F.E. memo. ref. Gen 727*

26-9-52

Certificate (if required) to be sent to (The Surveyors are requested not to write on or below the space for Committee's Minute)

