

## REPORT ON OIL ENGINE MACHINERY.

No. 13349  
-4 JAN 1935

Received at London Office

Date of writing Report 19 Dec 1934 When handed in at Local Office

Port of Amsterdam

No. in Survey held at Hengelo &amp; Amsterdam Date, First Survey 23 Nov 1933 Last Survey 10 Dec 1934

Reg. Book.

Number of Visits 74

Single  
Twin  
Triple  
Quadruple

Screw vessel

MV JACERSFONTEIN

Tons { Gross 1076.69  
Net 615.023

Built at Amsterdam

By whom built

N.V. Medeaal Schipb. N.V.

Yard No. 229

When built 1934

Engines made at Hengelo

By whom made

Joh. Stork &amp; Co

Engine No. 3654

When made 1934

Donkey Boilers made at Amman Rotterdam

By whom made

Cochran &amp; Co

Boiler No. 12609

When made 1934

Brake Horse Power 2 x 4150

Owners

N.V. Vereen Ned. Schipb. N.V.

Port belonging to

Gravenhage

Nom. Horse Power as per Rule 2034

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

Trade for which vessel is intended

Holland South Africa

OIL ENGINES, &amp;c.—Type of Engines Stork-Hewelman Rules 2 or 4 stroke cycle 2 Single or double acting double

Maximum pressure in cylinders 45 kg/cm<sup>2</sup>

Diameter of cylinders 600 mm

Length of stroke 1100 mm

No. of cylinders 6 x 2

No. of cranks 6

Mean Indicated Pressure 5.5 kg/cm<sup>2</sup>

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 845 mm

Is there a bearing between each crank Yes

Revolutions per minute 162

Flywheel dia. 2400 mm

Weight 5560 kg

Means of ignition Rules

Kind of fuel used Crude oil

Crank Shaft, dia. of journals as per Rule approved

Crank pin dia. 420 mm

Crank Webs

Mid. length breadth 1190 mm

Thickness parallel to axis

as fitted 420 mm

as fitted 337 mm

as fitted 245 mm

Mid. length thickness 245 mm

Thickness around eyehole

Flywheel Shaft, diameter as per Rule

Intermediate Shafts, diameter as per Rule approved

Thrust Shaft, diameter at collars as per Rule approved

as fitted 354 mm

Tube Shaft, diameter as per Rule

Screw Shaft, diameter as per Rule approved

Is the

tube

screw

shaft fitted with a continuous liner

no

as fitted

as fitted 304 mm

Bronze Liners, thickness in way of bushes as per Rule

as fitted

no liners

Thickness between bushes as per Rule

as fitted

Is the after end of the liner made watertight in the

propeller boss

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

If 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

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 end of the tube

shaft Yes

If so, state type Cedemall

Length of Bearing in Stern Bush next to and supporting propeller 1550 mm

Propeller, dia. 4250 mm

Pitch 4450 mm

No. of blades 3

Material Bronze

whether Moveable no

Total Developed Surface 5.35 M<sup>2</sup> sq. feet

Method of reversing Engines

his damen engine a governor or other arrangement fitted to prevent racing of the engine when declutched Yes

Means of lubrication

Forced

Thickens of cylinder liners 20 mm

Are the cylinders fitted with safety valves Yes

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material lagged

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine funnel

Cooling Water Pumps, No. 3

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Yes

Bilge Pumps worked from the Main Engines, No. 1

Diameter 200 mm

Stroke 140 mm

Can one be overhauled while the other is at work

Yes

Pumps connected to the Main Bilge Line

No. and Size 1-110 mm

How driven

self-priming centrifugal pumps

1-110 mm

ballast pump

Yes

Is the cooling water led to the bilges

No

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements

Ballast Pumps, No. and size One 2x7 x 7 1/2"

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 3 200 mm pumps

400 mm

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 6-3", 4 direct 6", 1 cofferdam 3", Tunnel 2-3" and 1-2"

In Pump Room

In Holds, &amp;c. 1-1x3", 1-2x3", 1-3x3", 1-4x3", 1-5x3", 1-6x3", 1-7x3", 1-8x3", 1-9x3", 1-10x3", 1-11x3", 1-12x3", 1-13x3", 1-14x3", 1-15x3", 1-16x3", 1-17x3", 1-18x3", 1-19x3", 1-20x3", 1-21x3", 1-22x3", 1-23x3", 1-24x3", 1-25x3", 1-26x3", 1-27x3", 1-28x3", 1-29x3", 1-30x3", 1-31x3", 1-32x3", 1-33x3", 1-34x3", 1-35x3", 1-36x3", 1-37x3", 1-38x3", 1-39x3", 1-40x3", 1-41x3", 1-42x3", 1-43x3", 1-44x3", 1-45x3", 1-46x3", 1-47x3", 1-48x3", 1-49x3", 1-50x3", 1-51x3", 1-52x3", 1-53x3", 1-54x3", 1-55x3", 1-56x3", 1-57x3", 1-58x3", 1-59x3", 1-60x3", 1-61x3", 1-62x3", 1-63x3", 1-64x3", 1-65x3", 1-66x3", 1-67x3", 1-68x3", 1-69x3", 1-70x3", 1-71x3", 1-72x3", 1-73x3", 1-74x3", 1-75x3", 1-76x3", 1-77x3", 1-78x3", 1-79x3", 1-80x3", 1-81x3", 1-82x3", 1-83x3", 1-84x3", 1-85x3", 1-86x3", 1-87x3", 1-88x3", 1-89x3", 1-90x3", 1-91x3", 1-92x3", 1-93x3", 1-94x3", 1-95x3", 1-96x3", 1-97x3", 1-98x3", 1-99x3", 1-100x3", 1-101x3", 1-102x3", 1-103x3", 1-104x3", 1-105x3", 1-106x3", 1-107x3", 1-108x3", 1-109x3", 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1-810x3", 1-811x3", 1-812x3", 1-813x3", 1-814x3", 1-815x



AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined and cleaned *yes*

Is a drain 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 *✓*  
Actual *✓*

Starting Air Receivers, No. *2*

Total cubic capacity *40 M<sup>3</sup>*

Internal diameter *1600 mm*

thickness *25 mm*

Seamless, lap welded or riveted longitudinal joint *unhd*

Material *SMS*

Range of tensile strength *20-32 t*

Working pressure

by Rules *approved*  
Actual *25 kg/cm<sup>2</sup>*

IS A DONKEY BOILER FITTED? *2*

If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only *yes*

PLANS. Are approved plans forwarded herewith for Shafting *3-5-34*  
(If not, state date of approval) *11-9-34 2-7-34*

Receivers *9-11-33*

Separate Tanks *3-11-33*

Donkey Boilers *attached*

General Pumping Arrangements *29-9-33*

Oil Fuel Burning Arrangements *29-9-33*

### SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*

State the principal additional spare gear supplied *As per Attached List*

The foregoing is a correct description,

**MACHINEFABRIK GEBR. STORK & Co. N.V.**

Manufacturer.

Dates of Survey while building  
During progress of work in shops - *19-23 Nov 23-30 Dec 4-7-8-14-21-28 Jan 3-9-30-31 Feb 1-8-9-12-23-28 March 2-7-9-16-23 April 4-6-11-12-16-19-26 May 3-11-17-25-29 June 1-2-5-7-8-20-22-27-29 July 16-18-19-20-21-22-23-24-25-26-27 Aug 1-14-17-22 Sept 10-14 Oct 3-16-22-30 Nov 5-17-20-24-27 Dec 10-11-13-18*  
During erection on board vessel - *July 23-26-27 Aug 1-14-17-22 Sept 10-14 Oct 3-16-22-30 Nov 5-17-20-24-27 Dec 10-11-13-18*  
Total No. of visits *74*

Dates of Examination of principal parts—Cylinders *19-4-34* Covers *19-4-34* Pistons *7-6-34* Rods *11-5-34* Connecting rods *25-5-34*  
Crank shaft *26-4-34* Flywheel shaft *✓* Thrust shaft *✓* Intermediate shafts *8-12-33* Tube shaft *✓*  
Screw shaft *7-12-33* Propeller *6-12-34* Stern tube *24-5-34* Engine seatings *1-8-34* Engines holding down bolts *3-10-34*  
Completion of fitting sea connections *19-7-34* Completion of pumping arrangements *17-11-34* Engines tried under working conditions *10-25-34*  
Crank shaft, Material *SMS* Identification Mark *4284/150* Flywheel shaft, Material *✓* Identification Mark *✓*  
Thrust shaft, Material *SMS* Identification Mark *753 FNB 21-11-33* Intermediate shafts, Material *SMS* Identification Marks *as per list*  
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *SMS* Identification Mark *77 1/2 FNB 7-12-33*

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

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *yes*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *no*

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 *yes*

If so, state name of vessel *M.V. Bloemfleurin Amst N°*

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

The Machinery has been made in accordance with the rules. Secretary's letters approved plans, workmanship throughout good. Redex Machinery, pumps, auxiliary compressors and bilge valves fitted with mechanical operated distance controls) which on a trial trip on the North Sea found working good.

Auxiliary compressor which does not require compressed air for starting up the first charging of the air receivers is placed aboard.

He is eligible in my opinion, for the approval of the Committee to be classed

*L.M.C. 12-34*

The amount of Entry Fee .. £ *72* :— : When applied for, *19*  
Special .. £ *1900* :— :  
Donkey Boiler Fee .. £ *75.60* :— : When received, *29-1-35*  
Travelling Expenses (if any) £ *325* :— : *29*

Committee's Minute *THE 15 JAN 1935*

Assigned *+ LMC 12.34*

*oil Eng. OG 2 DB 120 lb.*

Engineer Surveyor to Lloyd's Register of Shipping.



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