

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

14 DEC 1936

Date of writing Report 9th Feb. 1936 When handed in at Local Office

Port of BREMEN

No. in Survey held at

WESERMÜNDE

Date, First Survey 8th February 1936

Last Survey 23rd Nov. 1936

Reg. Book.

8579

on the STEEL SC. TRAWLER

NORTHERN DUKE

(Number of Visits 27)

Gross 655

Net 243

Built at WESERMÜNDE

By whom built

DEUTSCHE SCHIFF-UND MASCHINENBAU A.G.

WERK: SEEBECK

Yard No. 559

When built 1936

Engines made at WESERMÜNDE

By whom made DESCHIMAG, WERK: SEEBECK

Engine No. 1436

When made 1936

Boilers made at WESERMÜNDE

By whom made DESCHIMAG, WERK: SEEBECK

Boiler No. 760

When made 1936

Registered Horse Power

Owners MAC LINE LTD

Port belonging to LONDON

Nom. Horse Power as per Rule 167

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which Vessel is intended FISHING

ENGINES, &c.—Description of Engines ONE TRIPLE EXP. STEAM ENG. WITH L.P. TURBINE D.R. GEARED. Revs. per minute 120

Dia. of Cylinders 380 x 610 x 1000 2 Length of Stroke 660 2 No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 2.09 Crank pin dia. 2.20 2 Crank webs Mid. length breadth 140 2

as fitted 2.10 Mid. length thickness 100 2

Intermediate Shafts, diameter as per Rule 2.06 2 Thrust shaft, diameter at collars as per Rule 2.17 2

as fitted 2.10 2 as fitted 2.20 2

Screw Shaft, diameter as per Rule 2.30 2 Is the tube shaft fitted with a continuous liner

as fitted 2.40 2 as fitted 10.5 2

Bronze Liners, thickness in way of bushes as per Rule 14 2 Thickness between bushes as per Rule 12 2 Is the after end of the liner made watertight in the

as fitted 15 2 as fitted 12 2

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

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 fit tightly

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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller 1100 2

Propeller, dia. 3490 2 Pitch 3340 2 No. of Blades 4 Material and form whether Moveable No Total Developed Surface 46.5 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 80 2 Stroke 325 2 Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No. 2 Diameter 80 2 Stroke 325 2 Can one be overhauled while the other is at work

Feed Pumps No. and size 1 each duplex 190 x 127 Pumps connected to the No. and size 1 4073 duplex 152 x 152 1 Ejector

How driven Steam Main Bilge Line How driven Steam 1 each wheel 18 m/h. attached to main line

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size 1 each duplex 152 x 152 200

Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room 1 of 60 2, 1 of 70 2 from Ejector

In Pump Room In Holds, &c. in space for hold 1 of 60 2 & 1 of 70 2, in Main Fish hold

1 of 60 2, 1 of 70 2

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 150 2 Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 of 70 2 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line

Are they each 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

What Pipes pass through the bunkers How are they protected

What pipes pass through the deep tanks Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 250 m² 2691

Is Forced Draft fitted No. and Description of Boilers One Multitubular Boiler Working Pressure 228 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? If so, is a report now forwarded?

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 21.12.35 Main Boilers 8.11.35 Auxiliary Boilers Donkey Boilers

(If not state date of approval)

Superheaters 24.12.35 General Pumping Arrangements 11.2.36 Oil fuel Burning Piping Arrangements

SPARE GEAR.

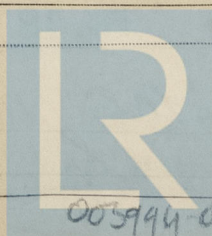
Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied 2 bottom end bearings, 1 set of air pump valves

6 piston bolts, 6 cylinder cover studs & nuts, 2 safety Valve springs.

The foregoing is a correct description,
Deutsche Schiff- und Maschinenbau Aktiengesellschaft

Manufacturer.



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Lloyd's Register

005944-004002-003

1936
 During progress of work in shops - - Feb. 8. March 24. July 7. 27. 31. Aug. 4. 7. 14. 21. 25. 28. 31. Sept. 8. 28. Oct. 2. 13. 16. 20. 23. 29.
 Nov. 3.
 Dates of Survey while building
 During erection on board vessel - - Oct. 29. Nov. 3. 6. 10. 13. 17. 20. 23
 Total No. of visits 27

Dates of Examination of principal parts—Cylinders 16. 20. 23/10.36 Slides 3. 11. 36 Covers 16. 20. 23. 10/36
 Pistons 3. 11. 36. Piston Rods 3. 11. 36 Connecting rods 29. 10. 36
 Crank shaft 8. 9. 36. Thrust shaft 28. 7. 36 Intermediate shafts 4. 8. 36
 Tube shaft ✓ Screw shaft 4. 8. 36 Propeller 28. 8. 36
 Stern tube 27. 7. 36 Engine and boiler seatings 23. 10. 36 Engines holding down bolts 10. 11. 36
 Completion of fitting sea connections 28. 8. 36
 Completion of pumping arrangements 23. 11. 36 Boilers fixed 29. 10. 36 Engines tried under steam 23. 11. 36
 Main boiler safety valves adjusted 20. 11. 36 Thickness of adjusting washers Port 35.92 Fresh 31.42 Siph. 15.2
 Crank shaft material J.M. Steel Identification Mark AC 8.9.36 Thrust shaft material J.M. Steel Identification Mark G.B. 28.7.36
 Intermediate shafts, material J.M. Steel Identification Marks A.C. 4.8.36 Tube shaft, material ✓ Identification Mark
 Screw shaft, material J.M. Steel Identification Mark AC 4.8.36 Steam Pipes, material Steel Test pressure 50 kg/cm² Date of Test 10. 11. 36
 Is an installation fitted for burning oil fuel ☒ Is the flash point of the oil to be used over 150°F. ☒
 Have the requirements of the Rules for the use of oil as fuel been complied with ☒
 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 NORTHERN PRIDE

General Remarks (State quality of workmanship, opinions as to class, &c. This Machinery has been built under Special Survey in accordance with the approved plans, the Secretary's letters, and in conformity with the requirements of the Rules. The materials used in the construction are made at works recognised by the Committee and tested by the Port Surveyors. Materials & workmanship are of good quality. During a 5 hours trial trip all the machinery has been tested under full working and manoeuvring condition, with and without surtine, and found satisfactory in all respects.
 This machinery is eligible in my opinion to be entered in the Port Reg. Book with records of: * LMC 11.36. Tail Shaft CL.

The amount of Entry Fee ... RM 60.- : When applied for,
 Special ... # 835.- : 23. 11. 1936
 Donkey Boiler Fee ... £ : When received,
 Travelling Expenses (if any) £ 120 : 8. 12. 36

Committee's Minute FRI. 18 DEC 1936

Assigned + LMC 11.36
 (Sh 1) CL

S. Carstensen
 Engineer Surveyor to Lloyd's Register of Shipping.