

REPORT ON MACHINERY.

No. 12984
FRI. 20 JUL. 1923

Received at London Office

of writing Report 10.7.1923 When handed in at Local Office 19 Port of Rotterdam
 in Survey held at Rotterdam Date, First Survey 15-12-22 Last Survey 16-6-1923
 Book. on the Steel screw propelling Dredger No 74 (Number of Visits 16) Tons }
 ter Built at Rotterdam By whom built N.V. Burgschouys, Machfab. & Scheepswerf When built 1923
 nes made at Rotterdam By whom made also when made 1923
 ers made at " By whom made " when made 1923
 istered Horse Power 94 Owners James Dredging Towing & Transport Co. Ltd Port belonging to London
 Horse Power as per Section 28 94 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

INES, &c.—Description of Engines One Vertical Triple expansion No. of Cylinders 3 No. of Cranks 3
 of Cylinders 13 3/4" 21 5/8" + 35 7/8" Length of Stroke 530 Revs. per minute 207 Dia. of Screw shaft as per rule — Material of screw shaft as fitted —
 he screw shaft fitted with a continuous liner the whole length of the stern tube — Is the after end of the liner made water tight
 he propeller boss — If the liner is in more than one length are the joints burned — If the liner does not fit tightly at the part
 een the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive — If two
 s are fitted, is the shaft lapped or protected between the liners — Length of stern bush —
 of Tunnel shaft as per rule — Dia. of Crank shaft journals as per rule 1 1/2" max Dia. of Crank pin 180 mm Size of Crank webs 210 x 110 mm Dia. of thrust shaft under
 ars — Dia. of screw — Pitch of Screw — No. of Blades — State whether moveable — Total surface —
 of Feed pumps — Diameter of ditto — Stroke — Can one be overhauled while the other is at work — 2 feed slonkey 6x4x6"
 of Bilge pumps — Diameter of ditto — Stroke — Can one be overhauled while the other is at work — 1" injector
 of Donkey Engines 3 Sizes of Pumps 2 x 6x4x6" 1 x 9x12x12 1/4" (sump pump) No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 2 x 2" Boiler room 1 x 2" In Holds, &c. 4 x 2"

of Bilge Injections — sizes — Connected to condenser, or to circulating pump — Is a separate Donkey Suction fitted in Engine room & size —
 all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible —
 all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line above
 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
 at pipes are carried through the bunkers None How are they protected —
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 the Screw Shaft Tunnel watertight No tunnel Is it fitted with a watertight door — worked from —

PLERS, &c.—(Letter for record S) Manufacturers of Steel Davia Colville & Sons Ltd
 Heating Surface of Boilers 10516 Is Forced Draft fitted No No. and Description of Boilers One horizontal marine boiler
 Working Pressure 190 lbs Tested by hydraulic pressure to 335 lbs Date of test 11-5-23 No. of Certificate 779
 each boiler be worked separately — Area of fire grate in each boiler 56.5 sq ft No. and Description of Safety Valves to
 boiler 2 spring loaded Area of each valve — Pressure to which they are adjusted 190 lbs Are they fitted with easing gear Yes
 allest distance between boilers or uptakes and bunkers or woodwork over 18" Mean dia. of boilers 14'-1 1/4" Length 11' Material of shell plates SM steel
 ckness 1 1/2" Range of tensile strength 20-32 ton Are the shell plates welded or flanged No Descrip. of riveting: cir. seams lap 2x riv
 seams Double butt 3x riv Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/4" Lap of plates or width of butt straps 18 1/2"
 centages of strength of longitudinal joint rivets 100% Working pressure of shell by rules 190 lbs Size of manhole in shell 12 x 16"
 plate 84.8% No. and Description of Furnaces in each boiler 2 Morrison Material SM steel Outside diameter 4' 5"
 of compensating ring 6 1/2 x 1 1/4" Description of longitudinal joint Welded No. of strengthening rings None
 gth of plain part top — Thickness of plates crown 1 1/16" bottom 1 1/16" Description of longitudinal joint Welded No. of strengthening rings None
 rking pressure of furnace by the rules 190 lbs Combustion chamber plates: Material SM steel Thickness: Sides 7/8" Back 7/8" Top 7/8" Bottom 7/8"
 h of stays to ditto: Sides 2 60 x 7 60 Back 7 87" Top 8 66 x 7 60 stays are fitted with nuts or riveted heads nut in margin Working pressure by rules 255 lbs
 erial of stays SM steel Area at smallest part 20" Area supported by each stay 620" Working pressure by rules 201 lb End plates in steam space:
 erial SM steel Thickness 1 3/16" Pitch of stays 7 7/8" x 10 1/2" How are stays secured formed in plates and double nuts Working pressure by rules 205 lb Material of stays SM steel
 a at smallest part 5.940" Area supported by each stay 3200" Working pressure by rules 209 lb Material of Front plates at bottom SM steel
 ckness 2 9/32" Material of Lower back plate SM steel Thickness 7/8" Greatest pitch of stays 15" Working pressure of plate by rules 18 lb
 eter of tubes 3 1/4" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates SM steel Thickness: Front 2 9/32" Back 7/8" Mean pitch of stays 9 1/2 x 13 1/2"
 ch across wide water spaces 15" Working pressures by rules 190 lbs Girders to Chamber tops: Material SM steel Depth and
 kness of girder at centre 9 1/2 x 2 x 1 3/4" Length as per rule 33.7" Distance apart 7.68" Number and pitch of stays in each 3 x 8.66"
 rking pressure by rules 240 lb Steam dome: description of joint to shell — % of strength of joint —

meter — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes —
 h of rivets — Working pressure of shell by rules — Crown plates — Thickness — How stayed —
 ERHEATER. Type — Date of Approval of Plan — Tested by Hydraulic Pressure to —
 e of Test — Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler —
 meter of Safety Valve — Pressure to which each is adjusted — Is Easing Gear fitted —



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *L*

SPARE GEAR. State the articles supplied:— *One set of coupling bolts, 2 top end bolts and nuts, 2 ^{bottom} top end bolts and nuts, 2 main bearing bolts and nuts, One set of piston rings, One set of valves for feed and budge pumps, a quantity of assorted bolts and nuts and iron of various sizes*

The foregoing is a correct description,

P.P. BURGERHOUT'S MACHINEFABRIEK & SCHEEPSWERF

P. Oerwa

Manufacturer.

Dates of Survey while building: During progress of work in shops --- *1922 1/2 1923 26/11 8/12 13/12 21/12 27/12 1/1 3/1 20/1 1/4 16/4 27/4*
During erection on board vessel --- *1923 14/6 26/6*
Total No. of visits *15*

Is the approved plan of main boiler forwarded herewith *Retained in London Office*

Dates of Examination of principal parts—Cylinders *28-5-23* Slides *8-2-23* Covers *8-2-23* Pistons *8-2-23* Rods *28-5-23*

Connecting rods *28-5-23* Crank shaft *28-5-23* Thrust shaft *L* Tunnel shafts *L* Screw shaft *L* Propeller *L*

Stern tube *L* Steam pipes tested *1-6-23* Engine and boiler seatings *11-5-23* Engines holding down bolts *1-6-23*

Completion of pumping arrangements *1-6-23* Boilers fixed *1-6-23* Engines tried under steam *26-6-23*

Completion of fitting sea connections *27-4-23* Stern tube *L* Screw shaft and propeller *L*

Main boiler safety valves adjusted *1-6-23* Thickness of adjusting washers *17 mms 14 mms*

Material of Crank shaft *Steel* Identification Mark on Do. *AB-4-23* Material of Thrust shaft *L* Identification Mark on Do. *L*

Material of Tunnel shafts *L* Identification Marks on Do. *L* Material of Screw shafts *L* Identification Marks on Do. *L*

Material of Steam Pipes *Steel* Test pressure *555 lbs*

Is an installation fitted for burning oil fuel *No* Is the flash point of the oil to be used over 150°F. *L*

Have the requirements of Section 49 of the Rules been complied with *L*

Is this machinery duplicate of a previous case *No* If so, state name of vessel *L*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been made in accordance with the Rules, approved plans and Secretary's letters, material tested as required and workmanship good, the machinery was found in a good working condition when tried and I am of opinion that this vessel is eligible to be recorded in the Society's Register Book with **LMC 6-23.***

Non propelling.

It is submitted that this vessel is eligible for THE RECORD. + NB 6.23. 1907b.

J.W.D. 26/7/23

J.J. Ochoa
Engineer/Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... *£ 24.00*
Special ... *£ 202.00*
Donkey Boiler Fee ... *£*
Travelling Expenses (if any) ... *£ 27.00*

When applied for, *13/7 1923*
When received, *20/7 23*
FRI. JUL 27 1923
+ NB 6.23 - 1907b

TUES. 13 JAN 1925
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Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.