

## REPORT ON MACHINERY.

No. 29875

Received at London Office

Date of writing Report 20-3-17 19 When handed in at Local Office 30/3/17 Port of Hull  
No. in Survey held at Hull Date, First Survey 11. 7. 16 Last Survey 16-3-17 19  
Reg. Book. pt-38 on the steel screw hauler "Resmilo" (Number of Visits 4.5)  
Master Built at Beverley By whom built Cook Weller & Gommell Tons Gross 258 Net 113  
Engines made at Hull By whom made C. D. Holmes & Co. Ltd. when made 1917-3  
Boilers made at Hull By whom made C. D. Holmes & Co. Ltd. when made 1917-3  
Registered Horse Power Owners G. F. Leight Port belonging to Grimsby  
Nom. Horse Power as per Section 28 80 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks 3  
Dia. of Cylinders 12½"-22"-35" Length of Stroke 24 Revs. per minute Dia. of Screw shaft as per rule 7.31 Material of screw shaft as fitted 7½" Iron  
Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight  
in the propeller boss yes If the liner is in more than one length are the joints burned yes 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 Length of stern bush 35½"  
Dia. of Tunnel shaft as per rule 6.6 Dia. of Crank shaft journals as per rule 6.93 Dia. of Crank pin 7" Size of Crank webs 13½" x 4½" Dia. of thrust shaft under  
collars 7" Dia. of screw 8-9" Pitch of Screw 10-9" No. of Blades 4 State whether movable no Total surface 29 ft²  
No. of Feed pumps one Diameter of ditto 2¾" Stroke 14½" Can one be overhauled while the other is at work  
No. of Bilge pumps one Diameter of ditto 2¾" Stroke 14½" Can one be overhauled while the other is at work  
No. of Donkey Engines two 2½" Sizes of Pumps 6" 4½" x 6" 5½" x 3½" x 5½" No. and size of Suctions connected to both Bilge and Donkey pumps  
In Engine Room two 2" dia. In Holds, &c. one 2" dia. in each compartment  
all suction also connected to ejector  
No. of Bilge Injections one size 3½" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 2½" dia.  
Are 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 none  
Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both  
Are 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  
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 are carried through the bunkers Forward Suctions How are they protected strong wooden casing  
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes  
Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel J. Spencer & Sons  
Total Heating Surface of Boilers 1402 ft² Is Forced Draft fitted no No. and Description of Boilers one single ended  
Working Pressure 195 lbs. Tested by hydraulic pressure to 390 lbs. Date of test 5-12-16 No. of Certificate 3179  
Can each boiler be worked separately Area of fire grate in each boiler 43.2 sq. ft. No. and Description of Safety Valves to  
each boiler two spring loaded Area of each valve 4.9 sq. in. Pressure to which they are adjusted 200 lbs. Are they fitted with easing gear yes  
Smallest distance between boilers or uptakes and bunkers on woodwork 8" lagged Main dia. of boilers 162" Length 10'-6" Material of shell plates steel  
Thickness 13/16" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double  
long. seams Y.R.B.B. Diameter of rivet holes in long. seams 17/32" Pitch of rivets 8 7/16" Lap of plates or width of butt straps 16 7/8"  
Per centages of strength of longitudinal joint rivets 86.5 Working pressure of shell by rules 197 lbs. Size of manhole in shell 16" x 12"  
Size of compensating ring 7" x 13/16" No. and Description of Furnaces in each boiler three plain Material steel Outside diameter 40"  
Length of plain part top 69 3/4 Thickness of plates crown 2 1/2" Description of longitudinal joint welded No. of strengthening rings  
bottom 63 Thickness of plates bottom 1 3/32 Working pressure by rules 202  
Working pressure of furnace by the rules 205 Combustion chamber plates: Material steel Thickness: Sides 11/16" Back 23/32" Top 11/16" Bottom 11/16"  
Pitch of stays to ditto: Sides 9 3/4" x 8" Back 9 3/4" x 8" 10 x 8" W. If stays are fitted with nuts or riveted heads nuts Working pressure by rules 202  
Material of stays steel Area at smallest part 2.07 sq. ft. Area supported by each stay 86.5 sq. in. Working pressure by rules 215 End plates in steam space:  
Material steel Thickness 1 5/32" Pitch of stays 18" x 18" How are stays secured 9 x 4 W. Working pressure by rules 195 Material of stays steel  
Area at smallest part 6.38 sq. ft. Area supported by each stay 324 sq. in. Working pressure by rules 203 Material of Front plates at bottom steel  
Thickness 7/8" Material of Lower back plate steel Thickness 31/32" Greatest pitch of stays 15" x 9 1/2" Working pressure of plate by rules 207  
Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" Material of tube plates steel Thickness: Front 7/8" + 3/4" Back 7/8" Mean pitch of stays 9 1/2"  
Pitch across wide water spaces 15" Working pressures by rules 250 Girders to Chamber tops: Material steel Depth and  
thickness of girder at centre 10 3/4" x 1 3/4" Length as per rule 35.8 Distance apart 11" Number and pitch of stays in each three 8"  
Working pressure by rules 197 Steam dome: description of joint to shell % of strength of joint  
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes  
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed  
SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to  
Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler  
Diameter 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? ☒

SPARE GEAR. State the articles supplied:— *Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of air, feed & bilge pump valves, one main & one donkey, check valve, one safety valve spring, six junk ring bolts & nuts, 3 boiler tubes & a quantity of bolts & nuts & washers of various sizes.*

The foregoing is a correct description,

*J. H. HOLMES & CO. LTD.*

*J. H. Holmes*

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } *1916: Jul 10, 17 Aug 15, 23, 29. Sep 12, 13, 15, 19, 29. Oct 5, 17, 20, 25, 31. Nov 3, 7, 9, 10, 13, 14, 15, 18, 21, 22, 23, 24.*  
{ During erection on board vessel - - - } *28 Dec 15, 1917: Jan 5, 9, 12, 14, 23, 30. Feb 10, 13, 15, 22. Mar 7, 13, 15, 16.*  
Total No. of visits *45.*

Is the approved plan of main boiler forwarded herewith *Yes please*

*Return for such vessels*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *5-1-17* Slides *12-1-17* Covers *16-1-17* Pistons *5-1-17* Rods *21-11-16*

Connecting rods *24-11-16* Crank shaft *22-11-16* Thrust shaft *17-7-16* Tunnel shafts *✓* Screw shaft *14-11-16* Propeller *14-11-16*

Stern tube *10-11-16* Steam pipes tested *22-2-17* Engine and boiler seatings *14-11-16* Engines holding down bolts *15-2-17*

Completion of pumping arrangements *13-3-17* Boilers fixed *13-2-17* Engines tried under steam *13-3-17*

Completion of fitting sea connections *14-11-16* Stern tube *14-11-16* Screw shaft and propeller *23-11-16*

Main boiler safety valves adjusted *13-3-17* Thickness of adjusting washers *P 1/4, S 3/16*

Material of Crank shaft *Iron* Identification Mark on Do. *1754 FLS* Material of Thrust shaft *Iron* Identification Mark on Do. *1288 X W*

Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shafts *Iron* Identification Marks on Do. *1728 FLS*

Material of Steam Pipes *solid drawn copper* Test pressure *40 lbs*

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

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

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Resparko*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel has been constructed under special survey in accordance with the approved plans & the rules of this society, the materials & workmanship are good. The Boiler & steam pipes have been tested by hydraulic pressure as above & found sound & tight. The machinery has been properly fitted & secured on board the vessel & on completion was tried under steam & found to work satisfactorily. The safety valves have been adjusted under steam & tested for accumulation which did not exceed 205 lbs.*

*In my opinion the vessel is eligible for the record & L.M.C. 3, 17.*

It is submitted that  
this vessel is eligible for  
THE RECORD. + L.M.C. 3, 17.

*J.W.D.*  
*3/4/17.*

*J.R.*

The amount of Entry Fee ... £ 1 : 0 :  
Special ... £ 12 : 0 :  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : 2/-

When applied for,

*30/3/17*

When received,

*31/3/17*

*Frank L. Stanger*

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE 3 APR 1917

Assigned

*+ L.M.C. 3, 17*

MACHINERY CERTIFICATE  
WRITTEN



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Lloyd's Register  
Foundation