

REPORT ON MACHINERY.

No. 9190

Received at London Office

15 SEP 1924

Date of writing Report

19

When handed in at Local Office

12 4

10 Port of

Belfast

No. in Survey held at
Reg. Book.Date, First Survey 31st October, 1923 Last Survey Sept 10, 1924

on the

New Steel S.S. Barrington Court

(Number of Visits)

69

Master

Built at

Belfast

By whom built

Workman Clark & Co Ltd

When built

Engines made at

Belfast

By whom made

Workman Clark & Co Ltd (440 1/2) when made

1924

Boilers made at

Belfast

By whom made

Workman Clark & Co Ltd (440 1/2) when made

1924

Registered Horse Power

Owners

Court Line Coy Ltd

Port belonging to

London

Nom. Horse Power as per Section 28

414

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

Three

Dia. of Cylinders

26, 42, 40

Length of Stroke

48

Revs. per minute

62

Dia. of Screw shaft

14.47

Material of

Steel

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

yes

If two

liners are fitted, is the shaft lapped or protected between the liners

yes

Length of stern bush

5'-0"

Dia. of Tunnel shaft

12.98

Dia. of Crank shaft journals

13.62

Dia. of Crank pin

14.47

Size of Crank webs

8 1/8"

Dia. of thrust shaft under

collars

14"

Dia. of screw

14 1/2"

Pitch of Screw

14 1/2"

No. of Blades

4

State whether moveable

no

Total surface

98

No. of Feed pumps

2

Diameter of ditto

4 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

4 1/2"

Stroke

24"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

See List

Sizes of Pumps

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

4 R. 2 @ 3", B.R. 2 @ 3"

Spec 1 @ 1 1/2" In Holds, &c.

No 1, 2 @ 3"; No 2, 2 @ 3 1/2";

No. of Bilge Injections

1

sizes

4"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

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

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

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

What pipes are carried through the bunkers

Bilge suction

How are they protected

Wood casings

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

yes

Is it fitted with a watertight door

yes

worked from

top platform

BOILERS, &c.—(Letter for record

Manufacturers of Steel

W. Beardmore & Co Ltd

Total Heating Surface of Boilers

4014

Is Forced Draft fitted

no

No. and Description of Boilers

3 single Ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

320 lbs

Date of test

24-6-24

No. of Certificate

340

Can each boiler be worked separately

yes

Area of fire grate in each boiler

66.125 sq ft

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

5.94

Pressure to which they are adjusted

18.5 lbs

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-6"

Mean dia. of boilers

15'-6"

Length

11'-0"

Material of shell plates

Thickness

1 1/4"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

long. seams

I.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

8 1/2"

Lap of plates or width of butt straps

18 7/8"

Per centages of strength of longitudinal joint

rivets 85.9

plate 85.9

Working pressure of shell by rules

181.5 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

24 3/4 x 26 3/8

No. and Description of Furnaces in each boiler

3 corr

Material

Steel

Outside diameter

Length of plain part

top

bottom

Thickness of plates

crown 19

bottom 37

Description of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

181.2 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

16"

Back

14 3/4"

Top

16"

Pitch of stays to ditto: Sides

8 x 9"

Back

9 1/2 x 9 1/2"

Top

8 x 10"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

Material of stays

Iron

Area at smallest part

14 3/4 x 20 3/4"

Area supported by each stay

84.4

Working pressure by rules

180 lbs

End plates in steam space:

Material

Steel

Thickness

1 3/8"

Pitch of stays

19 1/4 x 21 1/2"

How are stays secured

D.N. Wash

Working pressure by rules

182.5 lbs

Material of stays

Area at smallest part

6.66

Area supported by each stay

38.4

Working pressure by rules

189 lbs

Material of Front plates at bottom

Steel

Thickness

3/32"

Material of Lower back plate

Steel

Thickness

3/32"

Greatest pitch of stays

15 1/2 x 8"

Working pressure of plate by rules

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2 x 4 1/2"

Material of tube plates

Steel

Thickness: Front

3/32"

Back

13/16"

Mean pitch of stays

Pitch across wide water spaces

14 1/2 x 8 1/2"

Working pressures by rules

203 lbs

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

20 3/4 x 3 1/2"

Length as per rule

Working pressure by rules

185 lbs

Steam dome: description of joint to shell

none

% 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

none

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?

Yes

SPARE GEAR. State the articles supplied:—

Sup each bolts & nuts for top & bottom ends & main bearings, One set coupling bolts, one set feed & bilge pump valves, Quantity of assorted bolts nuts & iron. Tail Shaft & C.T. Propeller complete. one set L&C Rings for all pistons & piston valves.

The foregoing is a correct description,

FOR WORKMAN, CLARK & CO., LIMITED.

F. Cunningham

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1823 Oct 31, Nov 1, 13, 14, 15, 21, 23, 26, 27, Dec 12, 20, 21, 1924 Jan 16, 17, 23, 25, 29, 30, Feb 5, 11, 12, 27, 29, Mar 4, 11, 13, 18, 21, 24, 25, 31, Apr 9, 5, 16, 23, 29, May 2, 5, 8, 9, 12, 13, 14, 20, Apr 26, 28, 30, June 2, 4, 6, 17, 19, 20, 23, 24, 27, July 3, 4, 7, 9, 24 Aug 29, 30, 26, 28 Sept 3, 10, = 69
During erection on board vessel ---
Total No. of visits

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 5-5-M Slides 21-3-M Covers 13-3-M Pistons 13-3-M Rods 27-2-M

Connecting rods 7x4-M Crank shaft 9-5-M Thrust shaft 246-M Tunnel shafts 9-5-M Screw shaft 246-M Propeller 196-M

Stern tube 196-M Steam pipes tested 26-8-M Engine and boiler seatings 70-6-M Engines holding down bolts 25-8-M

Completion of pumping arrangements 75-8-M Boilers fixed 21-8-M Engines tried under steam 10-9-M

Completion of fitting sea connections 24-4-M Stern tube 74-4-M Screw shaft and propeller 75-4-M

Main boiler safety valves adjusted 3-9-M Thickness of adjusting washers 90h P 5/16 S 1/16, C 13h P 9/16 S 1/16, S 13h P 7/16 S 1/32

Material of Crank shaft Steel Identification Mark on Do. 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Material of Tunnel shafts Steel Identification Marks on Do. 6805, 6806, 6807, 6808, 6809, 6810, 6811, 6812, 6813, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824, 6825, 6826, 6827, 6828, 6829, 6830, 6831, 6832, 6833, 6834, 6835, 6836, 6837, 6838, 6839, 6840, 6841, 6842, 6843, 6844, 6845, 6846, 6847, 6848, 6849, 6850, 6851, 6852, 6853, 6854, 6855, 6856, 6857, 6858, 6859, 6860, 6861, 6862, 6863, 6864, 6865, 6866, 6867, 6868, 6869, 6870, 6871, 6872, 6873, 6874, 6875, 6876, 6877, 6878, 6879, 6880, 6881, 6882, 6883, 6884, 6885, 6886, 6887, 6888, 6889, 6890, 6891, 6892, 6893, 6894, 6895, 6896, 6897, 6898, 6899, 6900, 6901, 6902, 6903, 6904, 6905, 6906, 6907, 6908, 6909, 6910, 6911, 6912, 6913, 6914, 6915, 6916, 6917, 6918, 6919, 6920, 6921, 6922, 6923, 6924, 6925, 6926, 6927, 6928, 6929, 6930, 6931, 6932, 6933, 6934, 6935, 6936, 6937, 6938, 6939, 6940, 6941, 6942, 6943, 6944, 6945, 6946, 6947, 6948, 6949, 6950, 6951, 6952, 6953, 6954, 6955, 6956, 6957, 6958, 6959, 6960, 6961, 6962, 6963, 6964, 6965, 6966, 6967, 6968, 6969, 6970, 6971, 6972, 6973, 6974, 6975, 6976, 6977, 6978, 6979, 6980, 6981, 6982, 6983, 6984, 6985, 6986, 6987, 6988, 6989, 6990, 6991, 6992, 6993, 6994, 6995, 6996, 6997, 6998, 6999, 7000

Material of Steam Pipes S.D. Steel Test pressure 540 lbs 7'

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

Have the requirements of Section 49 of the Rules been complied with Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel Arlington Court

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

The Machinery of this vessel has been built under Special Survey. Materials & workmanship good, hydraulic tests satisfactory. The whole of the machinery has been satisfactorily installed & fixed in the vessel & tried under steam & is in good & safe working condition & eligible in my opinion & be classed & have records L.M.C. 9-24 Tail shaft C.L. & St.

It is submitted that this vessel is eligible for THE RECORD. + LMC 9.24. C.L. JWD 16/9/24.

Independent pumps: 2 Ballast duplex 8" x 10" x 10"; 1 Centrifugal circulating 11" suction x 3'-3" dia impeller. 1 evaporator feed duplex 3 1/2" x 2 1/4" x 3 1/2"; 1 General service duplex 8" x 6" x 8"; 2 Decis feed pps 4" x 9 1/2" x 21"

The amount of Entry Fee ... £ 5 0 0: When applied for, 8/9/1924
Special Electric Light ... £ 87 2 0:
Donkey Boiler Fee ... £ 15 0 0:
Travelling Expenses (if any) £ ... : When received, 15/9/24

William Butler, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI, 19 SEP 1924
Assigned L.M.C. 9.24 C.L.
CERTIFICATE WRITTEN