

REPORT ON MACHINERY

No. 8402

Date of writing Report 9/6/23 When handed in at Local Office 9/6/23 Port of Genoa
 No. in Survey held at Genoa Date, First Survey Nov. 21 1922 Last Survey 9 May 1923
 Reg. Book. 6567 on the Steel & PRENESTE (Number of Visits TEN)
 Tons Gross 6173 Net 3553
 Master Sestri Ponente Built at Sestri Ponente By whom built G. Ausaldi & Co. When built 1920
 Engines made at Sampierdarena By whom made " " " when made 1920
 Boilers made at " By whom made " " " when made 1920
 Registered Horse Power 506 540 Owners Roma Soc. di Navigazione Port belonging to Genoa
 Net Horse Power at Full Power 2890 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

BINE ENGINES, &c.—Description of Engines Double Reduction Geared Turbines No. of Turbines 3 Scotch
 Diameter of Rotor Shaft Journals, H.P. 90 7/8 MP 90 L.P. 150 1/2 Diameter of Pinion Shaft HP 8 MP 75 LP 115
 Diameter of Journals HP 8 MP 75 LP 115 Distance between Centres of Bearings HP 421 MP 465 LP 586 Diameter of Pitch Circle HP 14231 MP 14179 LP 27843
 Diameter of Wheel Shaft 360 Distance between Centres of Bearings 1674 Diameter of Pitch Circle of Wheel 2795.82
 Diameter of Thrust Shaft under Collars 364 Diameter of Tunnel Shaft as per rule 335 (at 2500 RPM 70 REVS. PER MIN.)
 Diameter of same as per rule 385 (C-4) Diameter of Propeller 5.800 Meters Pitch of Propeller 4.585 m.
 Screw Shafts ONE OIL GLAND FITTED YES State whether Movable No Total Surface GREATEST
 Diameter of Rotor Drum, H.P. 300 L.P. 800 MP 410 LP 800 (580 PARSONS 70 REVS. PER MIN.)
 Revs. per Minute at Full Power, Turbine HP 4500 MP 3388 LP 2800 Propeller 65-65

DETAILS OF BLADING.

EXPANSION	H.P.						L.P.			ASTERN					
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
1	23	43	286	416	10	10	64	678	5	29.75	41.75	650	906	1	1
2	25	46	320	462	8	8	80	710	5	39.75	57.25	660	930	1	1
3	28	54	346	508	7	7	100	750	5	49.75	72.75	670	945	1	1
4	31	62	372	544	6	6	76	940	3		38	646		2	
5							96	980	3		54	678		2	
6							120	1030	3		76	722		6	
7							130	1050	2						
8							160	1110	2						
9							195	1180	5						

size of Feed pumps 2 AUX. IND. 270 x 190 x 350
 size of Bilge pumps 2 IND BALLAST 190 x 180 x 250 1 IND BILGE 190 x 180 x 250
 size of Bilge suction in Engine Room 3 @ 120 4.72 2 @ 80 3.15
 In Holds, &c. 2 @ 80 in Each hold - Hand Pump above F. Peak 3.15
 Bilge Injections 1 sizes 270 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine Room & size Yes - 120
 The bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes
 Connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 Sized 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 below
 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
 Pipes are carried through the bunkers None How are they protected -
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Crew Shaft Tunnel watertight None Is it fitted with a watertight door - worked from -

FRS, &c.—(Letter for record 5) Manufacturers of Steel "LVA" Co., Savona
 Heating Surface of Boilers 636 sq. m. Is Forced Draft fitted Yes No. and Description of Boilers 3 Scotch 35B.
 g Pressure 180 lb./sq. in. Tested by hydraulic pressure to 25 kg. Date of test 3.20 No. of Certificate -
 boiler be worked separately Yes Area of fire grate in each boiler 4.95 sq. m. = 53 sq. ft. No. and Description of Safety Valves to -
 2 Spring loaded Yes Area of each valve 90 Pressure to which they are adjusted 1266 kg. Are they fitted with easing gear Yes
 distance between boilers or uptakes and bunkers or woodwork 2' 3" Mean dia. of boilers 4140 mm Length 3340 Material of shell plates Steel
 s 29 7/8 Range of tensile strength 44-50 kg. Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R. Lap.
 ns T.R. - D.B.S. Diameter of rivet holes in long. seams 30 Pitch of rivets 198 Lap of plates or width of butt straps 440
 ges of strength of longitudinal joint 94 Working pressure of shell by rules 185 1/2 Size of manhole in shell 400 x 300
 mpensating ring 2 x 300 x 29 No. and Description of Furnaces in each Boiler 3 Coer. Material Steel Outside diameter 1100
 f plain part top Thickness of plates 14 1/2 Description of longitudinal joint weld No. of strengthening rings None
 bottom bottom
 pressure of furnace by the rules 194 1/2 Combustion chamber plates: Material Steel Thickness: Sides 17 Back 17 Top 17 Bottom 22
 stays to ditto Sides 200 Back 210 x 200 Top 200 If stays are fitted with nuts or riveted heads MARGIN - NUTS Working pressure by rules 180 1/2
 of stays Steel Diameter at smallest part 200 x 210 Area supported by each stay 200 x 200 Working pressure by rules 205 1/2 End plates in steam space Steel
 Thickness 22 Pitch of stays 420 x 350 How are stays secured RIV. WASHER Working pressure by rules 186 1/2 Material of stays Steel
 at smallest part 60 Area supported by each stay 420 x 350 Working pressure by rules 197 1/2 Material of Front plates at bottom Steel
 s 22 Material of Lower back plate Steel Thickness 21 1/4 Greatest pitch of stays 355 x 200 Working pressure of plate by rules 320 1/2
 of tubes 63.5 Pitch of tubes 90 Material of tube plates Steel Thickness: Front 22 Back 20 Mean pitch of stays 180
 oss wide water spaces 345 Working pressures by rules Approved Girders to Chamber tops: Material Steel Depth and 2 @ 200
 ss of girder at centre 180 x 36 Length as per rule 643 Distance apart 200 Number and pitch of stays in each 2 @ 200
 ng pressure by rules - Steam dome: description of joint to shell None % of strength of joint - Diameter -
 ness of shell plates - Material - Description of longitudinal joint - Diameter of rivet holes - Pitch of rivets -
 ing 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?

SPARE GEAR. State the articles supplied:— 2 Bolts (Studs) & nuts for each size of rotor, pinion and wheel bearing, 1 set Coupling bolts for main shafting (1 size only used), 1/20 of total no of bolts for each gear case joint & for each turbine joint, Several oil thermometers, 1 set of bearing bushes for each size of rotor, pinion & wheel shafts, 1/2 set packing & springs for each rotor shaft gland, Set of Beds for 1 face of Michel Turbine, Set of liners for adjusting blocks, 1 set each of valves for feed, b'ge & lub. oil pumps, 1 escape valve spring of each size fitted, Assorted bolts & nuts, Plate & bar iron, Set of springs for safety valves of Turbs, Set of feed check valves, A number of Condenser tubes, boiler tubes & minor spares.

The foregoing is a correct description.

Manufacturer.

Afloat & in Dry Dock.

Dates	{ During progress of }
of Survey	work in shops - }
while	{ During erection on }
building	board vessel --- }
	Total No. of visits

1922 - Nov. 21, Dec 1, 8, 9, 11, 20
1923 - May 3, 4, 5, 9.

Is the approved plan of main boiler forwarded herewith

IN SHIP		" "		" "		" "		" "	
Dates of Examination of principal parts	Casings	9/12/22	Rotors	9/12/22	Blading	9/12/22	Gearing	9/12/22	
Rotor shafts	9/12/22	Thrust shaft	8/12/22	INTER. Tunnel shafts	8/12/22	Screw shaft	4/5/23	Propeller	3/5/23
Stern tube	replace 3/5/23	Steam pipes tested	11/12/22	Engine and boiler seatings	11/12/22	Engines holding down bolts	11/12/22		
EXAMIN. Completion of pumping arrangements	11/12/22	Boilers	EXAMIN. fixed 11/12/22	9/12/22	Engines tried under steam	9/5/23			
Main boiler safety valves adjusted	9/5/23	Thickness of adjusting washers	P. 18	19	17	17	18	17	5
Material and tensile strength of Rotor shaft	Mild Steel	44 - 50 Ks.	Identification Mark on Do.						
Material and tensile strength of Pinion shaft	Nickel "	60 - 64 "	Identification Mark on Do.						
Material of "Wheel shaft	Steel (mild)	Identification Mark on Do.	Material of Thrust shaft	Steel (mild)	Identification Mark on Do.				
Material of Tunnel shafts	"	" Identification Marks on Do.	Material of Screw shafts	"	"	Identification Marks on Do.			
Material of Steam Pipes	Cold drawn seamless steel -	Copper between	Test pressure	3 Times W.P.	+ 2 Times W.P.				
Is an installation fitted for burning oil fuel	Yes ✓	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 a duplicate of a previous case? TURKIE - MANIN - 66523 (Steels) If so, state name of vessel Manin (Two times only)
Please see London letter E 2/1/23 approving machy plans.

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been opened up examined, & scantlings checked, & all found in accordance with plans approved, and in satisfactory condition. Boilers afterwards found tight & safety valves adjusted under steam. Main and Auxiliary machinery tried under working conditions with satisfactory results. The materials have been tested by the Surveyors to the Register Italian & British Corporation, and the workman is, in our opinion, satisfactory. The tail shaft liner, which is constructed in 3 pieces as shown in design submitted, has been specially examined, and the metal of the shaft itself, has been found sound by drilling, & the joints have been tested under a red lead pressure pump & found tight. It is recommended that the Record of L.M.C. 523 be assigned subject to tail shaft, being specially examined at line joints within 2 years time.

The amount of Entry Fee Lik £ 600 :
SEE LON. LTR'S of 11/27-28
RE FEES.
Special 2040.

Donkey Boiler Fee	...	£	.
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Travelling Expenses (if any) £ 50.

When applied for.

11/6/19

When received,

1. 6. 23

Alex Lawrence.

Engineer Surveyor to Lloyd's Register of Shipping

for Self & P. T. Brown

Committee's Minute

FRI. 22 JUN 1923

TUE OCT 25 1933

Assigned

Feb 5. 23

F. D. C. V.

Lined for oil fuel 20
T.P. above 150° F.

Lloyd's Register
Foundation