

TUBINE ENGINES, &c.—Description of Engines		Single Reduction Geared		No. of Turbines		2 sets	
Diameter of Rotor Shaft Journals, H.P.	140 mfm	L.P.	140 mfm	Diameter of Pinion Shaft	150 mfm		
Diameter of Journals	150 mfm	Distance between Centres of Bearings	857 mfm	Diameter of Pitch Circle	8.59 inches.		
Diameter of Wheel Shaft	380 mfm	Distance between Centres of Bearings	1428 mfm	Diameter of Pitch Circle of Wheel	114.46 inches		
Width of Face	1474 mfm	Diameter of Thrust Shaft under Collars	375 mfm	Diameter of Tunnel Shaft	as per rule 13 3/8 inches		
No. of Screw Shafts	2	Diameter of same	as per rule 14 3/8 inches	Diameter of Propeller	as fitted 14 do		
No. of Blades	4	State whether Moveable	ho.	Pitch of Propeller	as fitted 14'—0"		
Thickness at Bottom of Groove, H.P.	102 mfm	L.P.	Disc	Diameter of Rotor Drum, H.P.	560 mfm	L.P.	1020 mfm
	162 mfm	Astern	168 mfm	Revs. per Minute at Full Power, Turbine	1830 max		152 max
					1700 service		134 service

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.
ST EXPANSION	30	620	8	52	1124	2	27	754	2
ND " 	38	636	8	64	1148	2	38	776	2
RD " 	48	656	8	79	1178	2	54	808	2
TH " 	40	760	5	98	1216	2	76	852	2
TH " 	49	778	5	120	1260	2	108	916	2
TH " 	60	800	5	146	1312	2	108	916	2
TH " 	74	828	5	178	1376	2	108	916	2
TH " 	90	860	5	216	1452	2			
				255	1530	3			

In Hold &c

No. of Bilge Injections	sizes	Connected to condenser, or to circulating pump	Is a separate Donkey Suction fitted in Engine Room & size
Are all the bilge suction pipes fitted with roses		Are the roses in Engine room always accessible	
Are all connections with the sea direct on the skin of the ship		Are they Valves or Cocks	
Are they fixed sufficiently high on the ship's side to be seen without lifting the Smokehold plates		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		Are the Blow Off Cocks fitted with a spigot and brass covering plate	
What pipes are carried through the bunkers		How are they protected	
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times			
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges			
Is the Screw Shaft Tunnel watertight		Is it fitted with a watertight door	worked from

010461-010465-0181

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? _____ If so, is a report now forwarded? _____

SPARE GEAR. State the articles supplied:—

To be placed on Board in Bilbao.

The foregoing is a correct description,

(Sgd) *W Black* Worksmen for La _____ Manufacturer.
Sociedad Espanola de Construcccion Naval.

Dates of Survey while building { During progress of work in shops -- } *March 2, May 2, June 4, July 14, 18, 1919. Jan 29, March 30, 31, May 20, 21, July 11, Oct. 6, 7, 8 Nov 2*
{ During erection on board vessel --- } *Nov 23, May 14, 21, 1920-21.*
Total No. of visits *Sixteen.* Is the approved plan of main boiler forwarded herewith *No.*

Dates of Examination of principal parts—Casings *2. 5. 19* Rotors *17. 7. 19* Blading *6. 10. 20* Gearing *22. 11. 20.*

Rotor shaft *6. 10. 20.* Thrust shaft *29. 1. 20. 31. 3. 20* Tunnel shafts *29. 1. 20. 31. 3. 20* Screw shaft *29. 1. 20. 31. 3. 20* Propeller *29. 1. 20.*

Stern tube *30. 3. 20* Steam pipes tested ✓ Engine and boiler seatings ✓ Engines holding down bolts ✓

Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam ✓

Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓

Material and tensile strength of Rotor shaft *Steel 28-32* Identification Mark on Do. *See list attached.*

Material and tensile strength of Pinion shaft *Steel 28-32* Identification Mark on Do. *do do.*

Material of Wheel shaft *Steel* Identification Mark on Do. _____ Material of Thrust shaft *steel* Identification Mark on Do. *do do*

Material of Tunnel shafts *Steel* Identification Marks on Do. _____ Material of Screw shafts *steel* Identification Marks on Do. *do do*

Material of Steam Pipes ✓ Test pressure ✓

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 a duplicate of a previous case *No.* If so, state name of vessel _____ ✓

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

These machines being well constructed of material tested to Rule requirements and according to approved plans are, in my opinion, eligible for classification.

The notation of + L.M.C., with date, to be deferred, pending the receipt of a satisfactory report as to fitting on board and performance under steam.

The amount of Entry Fee ... £ : : When applied for, _____
Special ... £ : : 19
Donkey Boiler Fee ... £ : : When received, _____
Travelling Expenses (if any) £ : : 19

(Signed) *Arthur A. Chalmers*
Engineer Surveyor to Lloyd's Register of Shipping.

TUE OCT. 9 1923

FRI SEP. 7 1923

TUE. 11 DEC. 1923

Committee's Minute

Assigned



© 2021

Lloyd's Register
Foundation