

REPORT ON MACHINERY.

No. 6
FRI. JUN. 11 1920

Received at London Office

Date of writing Report 2nd May 1920 When handed in at Local Office

Port of

Prague

No. in Survey held at
Reg. Book.

Prague - Smichov

Date, First Survey 1916-7

Last Survey 16th May 1920

on the

S. E. N^o 96

(Number of Visits 10)

Gross
Tons

When built 1918-20

Master

Built at Monfalcone

By whom built Cantieri Navale Triestino

Engines made at

Smichov

By whom made

United Machine Factories

when made 1920.5

Boilers made at

Königgrätz

By whom made

- do - - do - - do -

when made 1920.5

Registered Horse Power

Owners Fratelli Cosulich

Port belonging to Trieste

Net Horse Power as per Section 28 383

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 24 1/4 x 41 x 68

Length of Stroke 45

Revs. per minute 76

Dia. of Screw shaft

as per rule 13.9

Material of S. M. 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

Is the propeller boss

Yes

If the liner is in more than one length are the joints burned

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

fits tightly

If two

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

Length of stern bush 59 Brass bush 17 1/2

Dia. of Tunnel shaft

as per rule 12.4

Dia. of Crank shaft journals

as per rule 13.3

Dia. of Crank pin 13.5

Size of Crank webs 26.3

Dia. of thrust shaft under

Collars 13.3

Dia. of screw 17.0

Pitch of Screw

about being made at Hamburg

No. of Blades 4

State whether moveable

Total surface

No. of Feed pumps 2

Diameter of ditto 4

Stroke 23.6

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps 2

Diameter of ditto 4

Stroke 23.6

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines 4

Sizes of Pumps

5.0 x 1.2 x 9.8

7.8 x 1.5 x 7.8

6.0 x 4.0 x 4.7

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

Engine Room

In Holds, &c.

No. of Bilge Injections 2

sizes 5.9

3.59

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 the sluices on Engine room bulkheads 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 stokehold 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

OILERS, &c.—(Letter for record B.)

Manufacturers of Steel Witkowitz, Bergh & Eisenh Ges. Gelsenkirchener Berg- u. Hütten-AG Aachen.

Total Heating Surface of Boilers 5243 sq. ft.

Is Forced Draft fitted Yes

No. and Description of Boilers

2 S. B.

Working Pressure 12.65 kg/cm² Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler 5.9456 sq. m.

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers 47.24

Length 350.5

Material of shell plates S. M. Steel

Thickness 32

Range of tensile strength 44.2 to 47.2

Are the shell plates welded or flanged flanged

long. seams

Double DB.

Diameter of rivet holes in long. seams 34

Pitch of rivets 232.66

Lap of plates or width of butt straps 500

Percentage of strength of longitudinal joint

rivets 90.7

plate 85.4

Working pressure of shell by rules 12.9

Size of manhole in shell 407 x 508

Size of compensating ring 813 x 915 x 33

No. and Description of Furnaces in each boiler 3 Morrisons

Material Steel

Outside diameter 1225

Length of plain part

top

Thickness of plates

crown 16

bottom

Description of longitudinal joint welded

No. of strengthening rings

Working pressure of furnace by the rules 13.1

Combustion chamber plates: Material Steel Thickness: Sides 18 Back 18 Top 18 Bottom 23

Pitch of stays to ditto: Sides 234 x 228 Back 260 x 225 Top 238 x 254

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules 13.44

Material of stays Steel Area at smallest part 6.33

Area supported by each stay 260 x 225

Working pressure by rules 13.46 End plates in steam space:

Material Steel

Thickness 34

Pitch of stays 600 x 420

How are stays secured nuts & washers

Working pressure by rules 15.26

Material of stays Steel

Area at smallest part 7.3

Area supported by each stay 600 x 420

Working pressure by rules 13.84

Material of Front plates at bottom Steel

Thickness 23.5

Material of Lower back plate Steel

Thickness 21

Greatest pitch of stays 340 x 225

Working pressure of plate by rules 12.8

Diameter of tubes 76

Pitch of tubes 108 x 103.5

Material of tube plates Steel

Thickness: Front 23.5

Back 20

Mean pitch of stays 211.5

Pitch across wide water spaces 340

Working pressures by rules 12.9

Girders to Chamber tops: Material Steel Depth and

Thickness of girder at centre 225 x 48

Length as per rule 9.2

Distance apart 254

Number and pitch of stays in each 3 at 228

Working pressure by rules 12.37 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 Schmidt

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

W649-0186

IS A DONKEY BOILER FITTED? *Yes*

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

SPARE GEAR. State the articles supplied:— *Two bottom end bolts & nuts, four top end bolts & nuts, live main bearing bolts & nuts, 1 set coupling bolts & nuts, 1 set of feed pump valves, 1 propeller, 1 spare propeller shaft, 1 spare spring for all safety valves, 1 Valve spindle, (interchangeable for each engine) 1 set crank pin & 1 set of crosshead brasses, 1 Air & 1 Circulating pump rod, 1 set of valves for both, 1 set of piston springs for each cylinder, and an assortment of bolts, nuts and bar iron.*

The foregoing is a correct description,

Spojené strojírny akciová společnost
v Praze, Skoda, Ruzyně, Brno, a Banská Bystrica
Ústřední kancelář

Manufacturer.

Dates of Survey while building
During progress of work in shops -- *Few visits made from Vienna Office during the War, particulars not to hand.*
During erection on board vessel -- *Prague 12/1/20; 19/1; 29/2/20; 27/1; 9/2; 23/2; 2/3; 12/4; 15/4; 19/5.*
Total No. of visits *Prague 10*

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

" " " donkey " " " *Yes*

Dates of Examination of principal parts—Cylinders *19/1/20, 27/1* Slides *19/1/20, 27/1* Covers *19/1 - 27/1* Pistons *19/1 - 27/1* Rods *19/1 - 27/1*

Connecting rods *12/1/20, 27/1* Crank shaft *29/12/19* Thrust shaft *29/12/19* Tunnel shafts *29/12/19* Screw shaft *13/4/20* Propeller *13/4/20*

Stern tube *27/1/20 + 2/3/20* Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft *Steel* Identification Mark on Do. *404MB 11-16* Material of Thrust shaft *Steel* Identification Mark on Do. *4316 MK 6.17*

Material of Tunnel shafts *Steel* Identification Marks on Do. *360 MB 9.15* Material of Screw shafts *Steel* Identification Marks on Do. *361 MB 9.15*

Material of Steam Pipes *Steel* Test pressure

Is an installation fitted for burning oil fuel 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 *No* If so, state name of vessel

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

This Engine was mostly built during the War, under the supervision of the Vienna Survey and in consequence of the few opportunities offered for examination during this period, the separate parts were specially examined in detail while being dismantled, to be sent to Monfalcone, and found to be in accordance with the Requirements of the Rules.

The Boilers were partly built at Königgratz, all marked off, drilled and bolted together, the combustion chambers were built, rivetted up & caulked complete, bolted in position outside at furnaces, all ready for riveting & caulking. All combustion and main stays, together with tubes and stay tubes tried in position.

The material and workmanship of the Engines and Boilers are of good description.

The machinery of this vessel, when completed and placed on board, will be eligible in my opinion for the notation of L.M.C. in red, with date

Amount of Entry Fee ... £ 900.00 kr. : When applied for,

Special *2,600.00 kr. Vienna Office* 19

Donkey Boiler Fee ... £ : When received,

Travelling Expenses (if any) *Vienna 1364.00*

Prague 150.00

Total *14,322.00 £*

Committee's Minute

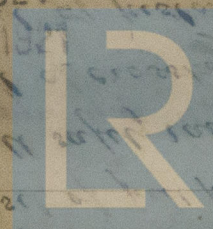
Assigned

C.N. Hughes M. Work
Engineer Surveyor to Lloyd's Register of Shipping.

TUE 11 OCT. 1921

FRI 11 FEB. 1921

TUE 29 JUN. 1921



© 2020 Lloyd's Register Foundation