

COPY.

Lloyd's Register of Shipping,

71, Fenchurch Street, E.C. 3.

17th October, 1935.

Dear Sirs,

E.

s.s. "CONTE ROSSO".
Loeffler Boiler and Escher Wyss
Turbine Installation.

I duly received your letter of the 7th instant, and I have to inform you that the remarks contained therein, together with the enclosed translation of a letter dated 26th September, 1935, from Messrs. Witkovitz Bergbau to Messrs. Cantieri Riuniti dell'Adriatico, regarding tolerances for the tubes for this installation, are noted.

With regard thereto I shall be glad if you will inform the Firm that a tolerance of $\pm 15\%$ on thickness is considered to be too great and that this Society would not be prepared to accept tubes having a thickness at any part of the circumference less than that corresponding to a minus tolerance of 5% where the tubes are cold finished and $7\frac{1}{2}\%$ where the tubes are hot finished.

If, however, the exigencies of manufacture show that tolerances less than $\pm 15\%$ on thickness cannot be worked to, then the nominal thickness of the tubes should be increased, e.g. the nominal thickness of the radiation superheater tubes could be increased to $4\frac{1}{2}$ mm. instead of 4 mm.



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It is concluded that the small tubes for the radiation superheater having diameter 34 mm. to 26 mm. will be cold finished, but that the tubes for the convection superheater having diameter 44.5 mm. to 34.5 mm. may be hot finished.

The proposed tolerances on diameters are considered to be in order.

With reference to the second paragraph of your letter, relating to the enclosed schedule of materials for the Escher Wyss Turbine, I think it well to refer you to your letter of the 25th ultimo and mine of the 7th instant.

From the information now available, plans Nos. 264124 264123/ showing details of the H.P. casing will be approved, provided the steel castings be made and tested at an approved works and the parts be made under the usual conditions of survey and testing.

With reference to Plans Nos. 264211 and 264212 showing details of the turbine casing for the feed pump turbine, it is noted that this turbine will be supplied with steam at 13.5 Kgs. per square cm. pressure at a temperature of 300°C., and in these circumstances the casing should be made of cast steel.

Accordingly, these plans will be approved, provided the turbine casing be made of cast steel, the castings be made and tested at an approved works and the parts be made under the usual conditions of survey and testing.



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Plan No.264484 showing steam pump shaft and turbine rotor will also be approved, provided the shaft and rotor be made under the usual conditions of survey and testing.

Plan No.264542 showing spindle inside hollow gear wheel shaft is being retained in this Office pending receipt of a reply to my letter of the 7th instant.

With reference to Plans Nos.G11826 and G11827 showing pinion and gear wheel, it is noted that the ultimate tensile strength of the chrome nickel steel for these parts is 90 Kgs. per square cm. and 80 Kgs. per square cm. respectively with only 7% elongation in each case. I shall be glad if you will ask the Firm to state whether their experience indicates that material having such low ductility is suitable for this purpose.

Two copies of each of the following plans are being returned to you under separate cover, viz:- No.264123, 264124, 264211, 264212 and 264484.

I am, Dear Sirs,

Yours faithfully,

Secretary.

The Surveyors,
TRIESTE.



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