

s.s. "CONTE ROSSO".

Loeffler Boiler and Escher Wyss Turbine Installation.

IT IS SUBMITTED the Trieste Surveyors be informed the remarks contained in their letter of the 7th instant and the enclosed translation of a letter dated 26.9.35 from Messrs. Witkovitz Bergbau to Messrs. Cantieri Riuniti dell'Adriatico, regarding tolerances for the tubes for this installation, are noted.

They should be asked to 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.

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 their letter, relating to the enclosed schedule of materials for the Escher Wyss Turbine, the Surveyors should be referred to their letter of the 25th ultimo and the Secretary's letter of the 7th instant.

From the information now available, plans



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Nos. 264123 and 264124 showing details of the H.P. casing merit approval, 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 sq. cm. pressure, at a temperature of 300°C., and in these circumstances the casing should be made of cast steel.

Accordingly, these plans merit approval, 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.

Plan No. 264484 showing steam pump shaft and turbine rotor also merits approval, 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 should be retained pending receipt of a reply to the Secretary's letter of the 7th instant.

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

Return 2 copies of Plan No. 264123

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- - - - 264211

- - - - 264212

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Retain 1 copy of each of the above.

Retain Plans No. 264542.

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