

Dr. Dancy

URGENT WIRE

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 6th instant, and the enclosed translations, have been noted.

With reference to the torsion shaft shown on plan No.264542, they should advise the Firm that the stress of 800 Kgs. per sq. cm., or 11350 lbs. per sq. inch, due to torsion is considered to be too high. The matter has been carefully examined and, having regard to the fact that this machinery is auxiliary to the main and that the material is High Tensile Chrome Nickel steel having a tensile strength of 75-85 Kgs. per sq. mm., it is considered that a stress of not more than 8000 lbs. per sq. inch = 563 Kgs. per sq.cm. might be permitted. In this case, the diameter of the torsion shaft should be not less than $2.43'' = 61.7 \text{ mm.}$

Return 2 plans No.264542. *Return 1 copy*

With reference to the feed pump casing of cast iron, the Firm should be advised that it is the practice of this Society to require that turbine casings and similar parts be made of cast steel when subjected to temperatures exceeding 425°F. (218°C.). The special quality of the cast iron for these turbine casings is noted, but this does not provide an assurance that the casings will not be liable to the deterioration associated with iron castings exposed to continuous high temperature, bearing in mind that the temperature of the steam is 300°C. Accordingly, it is considered that these casings should be made of cast steel, in accordance with usual practice. If, however, the Firm has had successful experience over long periods of the use of this pearlitic cast iron with superheated steam at the temperature and pressure in question, and will forward detailed particulars of their experience to this Office, the matter could be



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further considered.

Wire Trieste Surveyors.

"Conte Rosso. Feed pump turbine casing cast steel preferred.
If cast iron desired, Firm should forward full
particulars of their experience with pearlitic cast
iron at similar temperatures and pressures".

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W.D. *MR*

11.11.35.

S.D.

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