عنوان مقاله:
On materials selection and dezinfication of a tubular heat exchanger

محل انتشار:
بیست و سومین کنفرانس بین المللی برق (سال: 1387)

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خلاصه مقاله:
An investigation was made on the failure of atubular heat exchanger made up of copperbased alloys in a steam: power plant situated in Ahvaz city. Tubes were made initially fromyellow brass, and there after replaced by Cu- Ni alloys. The hot steam was entered through the top vapor opening and surrounded the outside of the copper based tubes. The heat transfer was taken place by heating the water inside the tubes, and thereby condensed the steam inside the steel shell. The cooling water was circulating water taken from cooling tower of the plant. The causes of failure were investigated performing various tests such as chemical analysis, optical microscopy and SEM examination. Study revealed that tube material selection is not proper, suffering from extensive dealloying and .impingement attack

کلمات کلیدی:
Tubular heat exchanger, Dezinfication, Materials selection, Circulating water