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Abstract Details

Title: Risk Analysis of Water Tubes in Boiler using FEMA

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Abstract: Failure Mode and Effects Analysis (FMEA) technique is used to identify potential failure modes for a product or process before the problem occur, to assess the risk associated with those failure modes and identify and carrying out measures to address the most serious concerns. The Failure Modes and Effects Analysis (FMEA) method has been used to study the reliability of many different power generation systems. This paper now applies that method to a water tubes (WT) in boilers. The aim of this study was to reduce the breakdown and specific power consumption for continuous power generation in the plant. In this study we work on the "Failure mode and effect analysis" technique in plant. Comparison is made between the quantitative results of an FMEA and reliability field data from real water tube systems. These results are discussed to establish relationships which are useful for future water tube designs.

Keywords: Failure Mode and Effect Analysis, Reliability Analysis, Risk Analysis of water tubes in boiler.