Fault Study and Reliability Analysis of Rotative Machine

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Abstract : This paper analyzes the influence of failure mode and harmfulness of rotative machine according to FMECA (Failure Mode, Effects, and Criticality Analysis) method, and finds out the weak links that affect the reliability of this equipment. Also in this paper, fault tree analysis software is used for quantitative and qualitative analysis, pointing out the main factors of failure of this equipment. Based on the experimental results, this paper puts forward corresponding measures for prevention and improvement, and fundamentally improves the inherent reliability of this rotative machine, providing the basis for the formulation of technical conditions for the safe operation of industrial applications.

Keywords : rotative machine, reliability test, fault tree analysis, FMECA

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