

Title: E-BABE- Investigation on Reciprocating-Compressor Faults Prevention Tools

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The Oil & Gas industry has continuously increased its requirements. The high complexity of technological systems and the higher competitiveness of markets, has compelled providers to implement adequate management strategies for these systems, in order to improve their availability and productivity. In this context, integrating reliability, availability and maintainability, by using methods, tools and engineering techniques (Mean Time to Failure, Equipment down Time and System Availability values) to identify failures. System failures prevents the achievement of the productive objectives. This paper presents an overview on the tools of failures identification for the reciprocating compressor. Three cases of reciprocating compressor failures are presented and analyzed. A Natural Gas Reciprocating Compressor (Dresser- Rand Made) (HHE-VG3) has been selected from an oil and gas field. The 1st case is a broken cross-head shoe. The 2nd case is a change in suction flow-rate. The 3rd case is broken suction valve center bolt. the most relevant aspects and findings of this study is conducted for assessing the operational performance of a reciprocating compressor system p ackage, which is installed and used in the oil and gas' industries. The results of the study of the three cases showed that the online condition monitoring of the reciprocating compressor can enhance the early prediction of the root cause failure, and that is recommended.

Biography

My Name: Hossam M. Elbakry
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Works as A Rotating Equipment Engineer At Oil And Gas Field.
My Experience Is 12 Years Till Now.
I Have Bachelor of Science (Bsc.) at 2007 in Mechanical Engineering (Power Branch).
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