



Analysis of Torsional Vibrations in Reciprocating Compressors driven by Electric Motors and Gas Engines

by:

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4th Conference of the EFRC
June 9th / 10th, 2005, Antwerp

Abstract:

Torsional vibrations usually occur in rotating machinery due to the dynamic behavior of motors (electric motors or gas engines) and driven machines like reciprocating compressors. It is necessary to detect critical speed ranges in advance by using suitable calculation methods. On the one hand standards and rules are applied, on the other hand advanced simulation tools are helpful to find the optimum driveline configuration considering nonlinear or transient effects and extended model structures. Simulation technologies can be used to determine the system sensitivity for an optimum rating of the dynamic system behavior.