

## Early Installation Effect on the Machines' Generated Vibration

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**Abstract :** Motor vibration issues were analyzed by several studies. It is generally accepted that vibration issues result from poor equipment installation. We had a water injection pump tested in the factory and exceeded the pump the vibration limit. Once the pump was brought to the site, its half-size shim plates were replaced with full-size shims plates that drastically reduced the vibration. In this study, vibration data was recorded for several similar motors run at the same and different speeds. The vibration values were recorded -for two and a half hours- and the vibration readings were analyzed to determine when the readings became consistent. This was as well supported by recording the audio noises produced by some machines seeking a relationship between changes in machine noises and machine abnormalities, such as vibration.

**Keywords :** vibration, noise, installation, machine

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