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[Introduction | With real life Examples](#) [Vibration Analysis for beginners 4 \(Vibration terms explanation, Route creation\)](#) [Random](#)

[Vibration Analysis of centrifugal pump base frame using ASNYS Workbench](#) [Principles of Vibration Analysis with Femap and NX](#)

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Analysis [SOLIDWORKS Simulation - Random Vibration Analysis](#)

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Simulation for Vibration Analysis

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the form of a power spectral density. The overall acceleration response x GRMS is $x = \sqrt{\int_{f_1}^{f_2} P_{n(f)} df}$, where $P_{n(f)}$ is the power spectral density. The Miles equation is $G_{rms} = \sqrt{P_{n(f)} \cdot \pi \cdot 2 \cdot \xi \cdot 1.2}$

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Response The Miles equation is a simplified method of calculating the response of a single-degree-of- freedom system to a random vibration base input, where the input is in the form of a power spectral density. The Miles equation is

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