

# **Degradation Process in Nickel Plated Electric Guitar Strings: An Experimental Study**

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The following is a report that describes the development, execution and results of an experimental study which sought to investigate the tonal quality of electric guitar strings and how this quality degrades over time due to vibrational stress and corrosion. Several tests were carried out on sample strings of varying levels of degradation. It was found that no significant dependence exists between stress degradation and corrosion of electric guitar strings.

However, as the effects of degradation due to corrosion become more prominent, the effects of degradation due to stress become less evident. The effects of both clean and distorted tone were also investigated in relation to tonal quality. It was found that, in some cases, the use of distorted tone can lessen the prominence of degradation when compared with the use of clean tone.