



Advances in Construction Vibration Monitoring

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New construction on a hospital campus often occurs near existing facilities that more than likely house vibration sensitive equipment or activities. A common concern is the effect that vibration from construction may have on these sensitive operations.

Traditional construction vibration monitors are configured to measure levels corresponding to building damage thresholds. Unfortunately, vibration-sensitive equipment can be adversely affected at levels that are orders of magnitude lower than this. Furthermore, while most construction vibration monitors provide level information at a single dominant frequency, most criteria for sensitive equipment are specified over a range of frequencies.

Recent advances in remote access computer technology have made it possible to use an internet connection to monitor the vibrations near sensitive equipment remotely, and in real time. The measured data can be compared directly to the specific instrument criteria; and the internet connection provides a means to access and control the instruments remotely, download data without the need for site visit, and to send text or e-mail alarms when the criteria have been exceeded

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