

Bearing Condition Monitoring with Acoustic Emission Techniques

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Abstract : Monitoring the conditions of rotating machinery as bearing is important in order to improve its stability of works. Acoustic emission (AE) and vibration analysis are some of the most accomplished techniques used for this purpose. Acoustic emission has the ability to detect the initial phase of component degradation. Moreover, it has been observed that the success of vibration analysis does not take place below 100 rpm rotational speed. This because the energy generated below 100 rpm rotational speed is not detectable using conventional vibration. From this pint, this paper has presented a focused review of using acoustic emission techniques for monitoring bearings condition.

Keywords : condition monitoring, stress wave analysis, low-speed bearings, bearing defect diagnosis

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