



Visvesvaraya Technological University
BELGAUM, KARNATAKA

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ಬೆಳಗಾವಿ, ಕರ್ನಾಟಕ

A PROJECT REPORT ON
CONDITION MONITORING OF MACHINE
TOOLS USING VIBRATION SIGNALS

(Sponsored By KSCST, Bangalore)

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fulfillment of the requirement for the award of Bachelor of Engineering
degree in Mechanical

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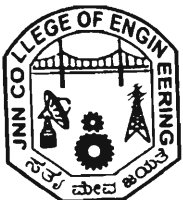
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ABSTRACT

Nowadays machine maintenance has become the major concern in the production oriented companies. In some situations the machines are subjected to overall maintenance even though it is not required. There are many parameters which cause vibration in a particular machine for example bearing problem, gear problem, misalignment....etc, hence engineers need to study the vibration causing parameters and then have to decide which parameter is causing more vibration and then have to subject that parameter for maintenance.

In this work, we selected two machines CNC 74, CNC 75 of Perfect Alloy Components Pvt, Ltd, Shivamogga & PSG Lathe of our college machine shop. We collected Vibration signals using VibXpert II and compared with the standard ISO 10816 and the condition of the machines was predicted and suitable maintenance strategies were suggested.