

ABSTRACT

Motor induction is one of the critical need who often used in the world industry. Dependency used the motor induction that continuously this resulted in the motor induction will experience decreased efficiency work. symptoms of the damage to the motor induction who often happened are unbalance, misalignment, looseness.

In this study has built the vibrations detection of the system used to clarification of the damage contained in the motor induction. Accelerometer as vibration sensor are used to measure changes in gravity of the vibration generated by the motor induction used Fuzzy Inference System with method Fast Fourier Transform as calculation technique for clarification damage through signal vibration.

The detection of data through gravity change of the vibration which is generated by the motor induction that there three conditions are detected, namely around slowly with frequency 20Hz, a round with frequency 40 Hz, and round quickly frequency 60 Hz. Data obtained from each accelero cencor sumbu (x) and accelero sumbu (y) managed to identify vibration 95 % and declared each-each vibration in the unit m/s^2 .

Keyword : *Vibration, Accelerometer, Motor Induction, Fast Fourier Transform.*