

ABSTRACT

Vibration is phenomenon of object motion back to back, under the force of the action. Normally, vibration is not requirement but inevitable. At best is attempt limit the size of the vibration within acceptable limit. For induction motor three phase the vibration may be due to several reasons. That is, irrelevant between the grooves of the stator and rotor, the eccentricity of the rotor both static and dynamic, and angle in the rest of the rotor bars. There is happen from design and manufacturing of non-standard, deterioration from used, or due to other factors external that act. Distortion of sine wave effective to non-distribution of balance of the magnetic field in the motor. Then, the noise and vibration is occur. Which the noise and vibration effective to mechanical loss, performance and motor life time is down. Therefore, this research is occur for contribution impact of skewed slot the rest of the rotor bars in the induction motor three phase effective to distribution of magnetic field and mechanical vibration of motor use 3-D finite element method (3-D FEM). Developed for the way of the study of angle in the rest of the rotor bars of induction motor impact to vibration.