Abstract

Bearing in equipment that supports the component forces that occur in equipment. Damage or failure bearing will be followed by other component failure. One of the causes for bearing failure is its failure of lubrication system. The failure of the lubrication system can be caused by the lubricant, lubrication mechanisms and schedules are not appropriate.

Indication of bearing damage can be identified by measurement of vibration levels and patterns, both local defect and wear. Based on the results of vibration measurements will be evaluated periodically so that the effectiveness of lubrication greater damage can be avoided. This study emphasis on the existing bearing on the blower which includes motor and blower bearings. The data will be used covering the period of lubrication and vibration measurements on vertical and horizontal positions. The study was based on the vibrational spectrum of both general and specific damages and based on the amplitude of vibration in some periodic damage will be compared with the period of lubrication so that effective lubrication schedule obtained.

The result of study show that vibration signals acquired include the misalignment, looseness, unbalance in blower FN-F. This indicates that the bearing of local disability and reinforced by the existence of a fundamental defect frequency (FDF) on the bearing, which eventually caused damage to mechanical looseness type c. Lubrication period is not optimal to be one cause of the damage so that bearing damage is distributed either locally or can not be avoided.

Keyword: bearing, vibration, blower, FTF, BPFI, BPFO, BSF