

Diagnosis and damage of bearings

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The article describes typical damage of rolling bearings and basic methods of their detection. From various methods of working bearings diagnosis the vibration method selected. Vibration signal contains a series of important technical information about the machine condition and is currently the most frequently used in diagnostic bearings systems. Furthermore, structure of vibroacoustic signal the frequency generated by the damaged bearing depends on the causes of the damage, the phases of its development and in particular the size of signals from other kinematic nodes, load, service quality and environmental impact. Monitoring the dynamic state of bearings nodes can carry out repairs technical conditioned by state of machines and omission preventive repairs conditioned by time and emergency repairs. In addition, the article describes the classification of bearing damage according to ISO standards, which identified the mechanisms related to the formation of any type of damage.

Keywords: rolling bearings, Vibration diagnostics.

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