Analysis of Mechanical Faults of Rotating Machines by Current Signature Analysis Methods

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The target area of the paper is diagnostic measurements of electric rotary machines, whether industrial or industrial-research applications. The theoretical and practical experience of recent years have provided a significant basis for the creation of work.

Assessment of the diagnostic procedure and application of electrical rotating machines, which means that the weighing and merging of currently known measurement methods to identify a machine-specific error is not yet a clearly known solution. There are non-destructive and non-destructive processes, both of which I've chosen from a family.

For diagnostic measurements, I used the following methods:

•Production of a Park vector and its x and y-components spectrum

•Temperature measurement and counting

The procedures listed above provide a basis for starting work. When measuring rotary machines, it is necessary to take into mind the question of accessibility, how the work can be carried out, which means that the measurement methods I have carried out and considered can be divided into two parts.

•Measurements that can be carried out under laboratory conditions.

•Measurements that can be taken under industrial conditions.

By industrial circumstances, it is understood that the operating conditions of the rotating machine do not allow 'easy' access or are not permitted in order to ensure smooth operation. In the case of the industrial hall, there are several engines. As a result, I mean splitting into two parts, because by laboratory conditions I mean that I have tried to create all the measurement conditions that are only typical of the machine, or a distraction that has not been averted, to work with it in view.

References

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