

Frictional Work as a Sliding Wear Evaluation Parameter

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ABSTRACT

The purpose of this research paper is to demonstrate that frictional work can be used as a new and previously unused parameter in the analysis of sliding wear data. Three different applications of frictional work as a sliding wear data evaluation parameter will be presented in this paper. The first application shows that frictional work is a powerful approach in the evaluation of contact lubricants. Another application demonstrates that frictional work can be used as a measurement system evaluation parameter for sliding wear machines. Finally, upper and lower limits are calculated for a control chart based on frictional work values to insure the correct operation of a sliding wear machine. These applications successfully used and established the frictional work parameter as a useful tool in the analysis of sliding wear data.