

Automatic machine condition monitoring is based on measurements of physical phenomena that are correlated with the machine condition and can therefore be used as symptoms of CNC machine wear. However, the measured values depend not only on the condition of the CNC machine tool, but also on many other random process parameters, which makes the relationship between the condition of the CNC machine tool and the measured value very complex and of a statistical nature, rather than a strict and predictable one. Therefore, developing a robust and reliable CNC machine tool condition monitoring system requires combining various meaningful signal features that best describe the machine tool condition. There are many signal features (SF) that can be extracted from a signal in the time, frequency, or time and frequency domains. Since it is not really possible to predict which signal features will be useful in a specific case, the informative ones, correlated with the machine's condition, should be selected automatically. Information obtained from the signals of one or more sensors should be combined into a single tool condition assessment. This can be achieved using various artificial intelligence methods.

1. The authors omitted the influence of cutting parameters and cutting tool wear in their research. Please justify this.
2. Please present a brief theory and structure of SE-ResNet.
3. I propose to present an example vibration and temperature signal - recorded during the tests.
4. What signal measures (SF) were used in the research. In the time or frequency domain?
5. How did the authors determine the dynamic characteristics of the machine tool? It is very important.