

## **Study of Inhibition of the End Effect Based on AR Model Predict of Combined Data Extension and Window Function**

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**Abstract :** In this paper, the EMD decomposition in the process of endpoint effect adopted data based on AR model to predict the continuation and window function method of combining the two effective inhibition. Proven by simulation of the simulation signal obtained the ideal effect, then, apply this method to the gearbox test data is also achieved good effect in the process, for the analysis of the subsequent data processing to improve the calculation accuracy. In the end, under various working conditions for the gearbox fault diagnosis laid a good foundation.

**Keywords :** gearbox, fault diagnosis, ar model, end effect

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