THE UNIVERSITY of ADELAIDE

Bearing Condition Monitoring

Acoustics, Vibration, and Control Research Group

Project description

Bearings are used widely in machinery and eventually fail. Although they are relatively inexpensive, their operational failure causes significant financial cost. By measuring the vibration generated by a bearing, early-stage faults can be identified. This project involves developing new algorithms to identify and characterise bearing faults.

Typical rolling element bearing

Primary aim

The primary aim is to conduct further research and development of algorithms to identify line spall and pitting defects on the inner and outer raceways of rolling element bearings.

Secondary aim

The secondary aim is to predict the remaining useful life of a bearing.

Student attributes

The student should have background knowledge in vibrations, signal processing, and MATLAB.

For further enquiries

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