

## Third Laureate Research & Development

**Project Title:** Vibration condition monitoring system  
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### Abstract:

One of the vital problems in maintenance engineering is to find a reliable and efficient strategy. To this end, vibration monitoring and protection systems due to their ability to predict machinery failure have found high importance. Rotary machine vibration measurement systems have been developed to measure vibration parameters on different points of a machine so that the user might estimate the condition of the machine and diagnose any possible malfunctions. Hardware of the system consists from five different input / output cards: power supply, tachometer, vibration, gateway & malfunction. Gateway card is used for set up and configuring the system for connection protocols. Vibration card is a four channel input module used for connection of vibration transducers to the system. On this card user can see vibration values and program the alarm and trip values. Tachometer/ temperature cards are used for monitoring rotating speed and semi static parameters such as temperature, pressure, flow, etc. finally power supply card supplies the needed electricity for the whole system and sensors.

