Project Bi- Weekly Progress
Date: 9/19/2013

Project Title: Automated High Volume Bearing Bore Gage
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Mentors/ Coordinator/ Sponsor: Dr. Cartes, Dr. Frank / Joseph Potts / Koyo Bearings

1. Project Title: Automated High Volume Bearing Bore Gage

2. Project Objectives/tasks Breakdown:
The objective of this project is to update the software and interface on a bearing bore gage. This device must be user friendly and integrated into a system that monitors multiple gages at once.

3. What was accomplished the last two weeks on individual tasks- representative supporting data/ documents
We attempted to probe the LVDT and determined that the information is being transmitted by current. We also took a tour of Koyo Bearing's facility in order to understand their needs and the operating environment. We have researched several PC104 boards and signal conditioners. We have come up with several possible configurations for the internal circuitry.

4. Summary of problems encountered and actions taken (and by whom)
The LVDT did not send information in the form of a voltage like we assumed. In order to check the current, we created a resistor probe and measured the voltage across it. The bearing bore gage has several leaks in the moisture trap. We have contacted Koyo Bearing and they are sending us a replacement cap. The master bearings, which are used to calibrate the system, have not been located. We are currently looking for a point of contact with last year's team in order to locate these crucial parts. If they can not be found, Koyo will be sending us new master bearings.

5. Attached Gantt chart modifications and analysis if project is behind schedule and summarize actions planned to overcome the problems)

6. Work planned for the next period and the person(s) responsible:
We are planning on selecting an internal configuration and continuing research on the individual components. The selected configuration will be submitted to Koyo Bearing for approval. We will begin forming possible housing designs for the GUI and CPU. The midterm report and presentation will be completed.

7. Open comments/suggestions (Please feel free to include your private comments):
Koyo Bearing has informed us that the measuring system in place is operating very well. We are only to upgrade the interface; this involves a new GUI (graphic user interface), CPU, and electronic housing.

Coordinator/ Instructor assessment report and corrective action