



Key Benefits

- Automatic control sequences
- Unlimited number of spreadsheet style test schedules, test data etc.
- Increased unmanned running
- Continual monitoring for alarm conditions
- Automatic calibration tracking

Eye to the future | Window on the world

Summary

The system was designed to automate the running of a high speed axle test rig so that unmanned endurance tests of the axle differential could be carried out safely. Controlled and emergency shutdown routines were implemented so that in the event of a failure of the axle or differential, the rig can be properly stopped and a shutdown history log is created for later analysis.

An unlimited number of spreadsheet style test schedules can be defined in the system. They are broken down into a number of phases, each of a defined length or number of rotations of the axle, and for each phase the required input speed, input torque, output differential, logging requirements, alarm limits, and any braking to be applied, is defined. In addition, differential cooling parameters are also passed to three Prodigy software controllers.

All signals were recorded so that tests could be reviewed in the trending facility or in the form of printed reports. As the test data is also held in an Access database format, it can also be copied over the network link to individual engineer's desktop PCs for further analysis.

Equipment Used

- Intel based Pentium PC using
Microsoft Windows NT 4
Light Pen Operator Interface
- 2 x TA Dynamometer Controllers
- 1 x ABB Torque Controller
- Plug in cards included
4 x PCL-818HG 8 Ch A/I,
1 Ch A/O, 16 Ch D/I,
16 Ch D/O
1 x PCL-833 3 Ch Quad/I



If you would like to find out more about this application, please contact the sales office who will put you in touch with the original Systems Integrator.