

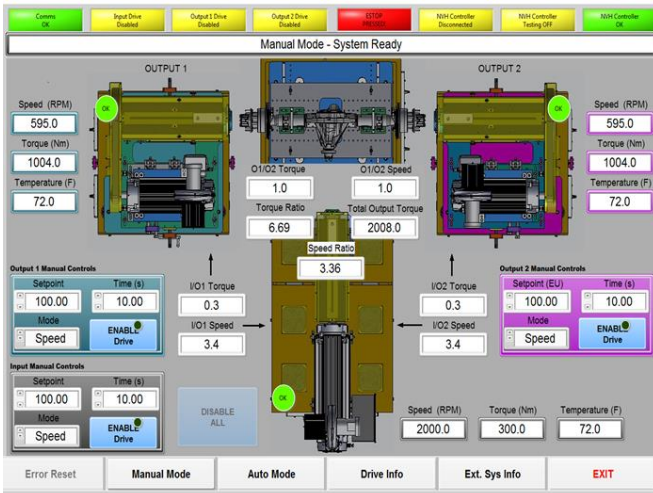
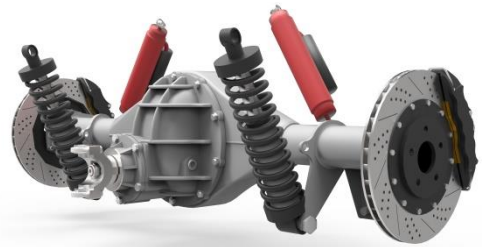
We are a nimble organization with years of experience deploying software products and engineering services in the most demanding production and laboratory environments.

Project Spotlight: Universal Axle Dynamometer

Objectives:

Create a data acquisition and supervisory control system for the operation of heavy-duty axles. In addition, contribute to the machine design and sensor selection to ensure NVH capabilities necessary for axle development.

Solution Benefits:



Live display and control dashboard

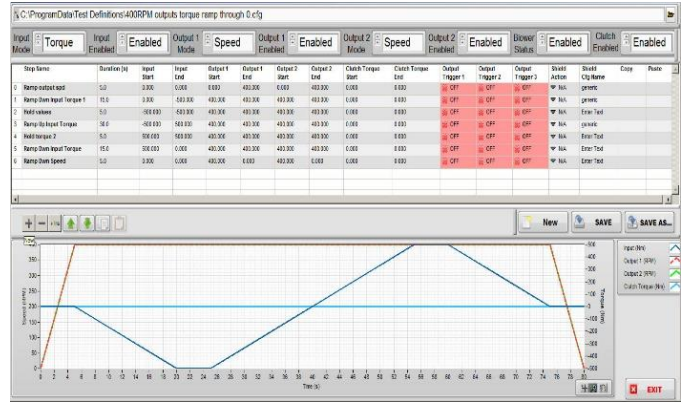
- NVH data acquisition and analysis tool
- Can be configured for a number of axle geometries and layouts
- Supports torque and speed sweeps
- Supports manual control or automatic control through an intuitive profile editor
- Automatic interfacing with external devices
- Commercial off-the-shelf hardware from National Instruments
- Modular control and hardware design supports integration of a battery simulator and CAN BUS communication for electric vehicle motor applications

To learn more about this and other Signal.X projects, please visit signalxtech.com/about/portfolio/

Technology Highlights:

Control and Acquisition

The test profile editor is a key component of the machine. Designed with flexibility in mind, it allows users to configure and reuse a wide variety of test sequences. The software remotely controls the drives to integrate flexibility of operation between 3 motors including regeneration, absorption and mechanical differentiation. Complete logging and review capabilities are integrated.



Universal NVH

The ability to connect to external signal analyzers is important for an NVH dynamometer. Sensor and trigger outputs allow the machine to universally interface with peripheral devices as well as the Signal.X NVH Controller. Quality NVH data is assured by placing each motor and the device under test on its own adjustable platform to isolate the axle from all external influences.

Interface with Shield

The Signal.X NVH Controller together with metrics developed in Shield are used to directly analyze signals such as vibration, speed and torque.

This project showcases our ability to realize a vision to fit one customer's circumstance. Let us help you realize yours.

About Signal.X:

Since 2004, Signal.X has specialized in Test & Measurement Products for noise & vibration (NVH), production and laboratory test automation, functional test design, large data management, and custom application development.