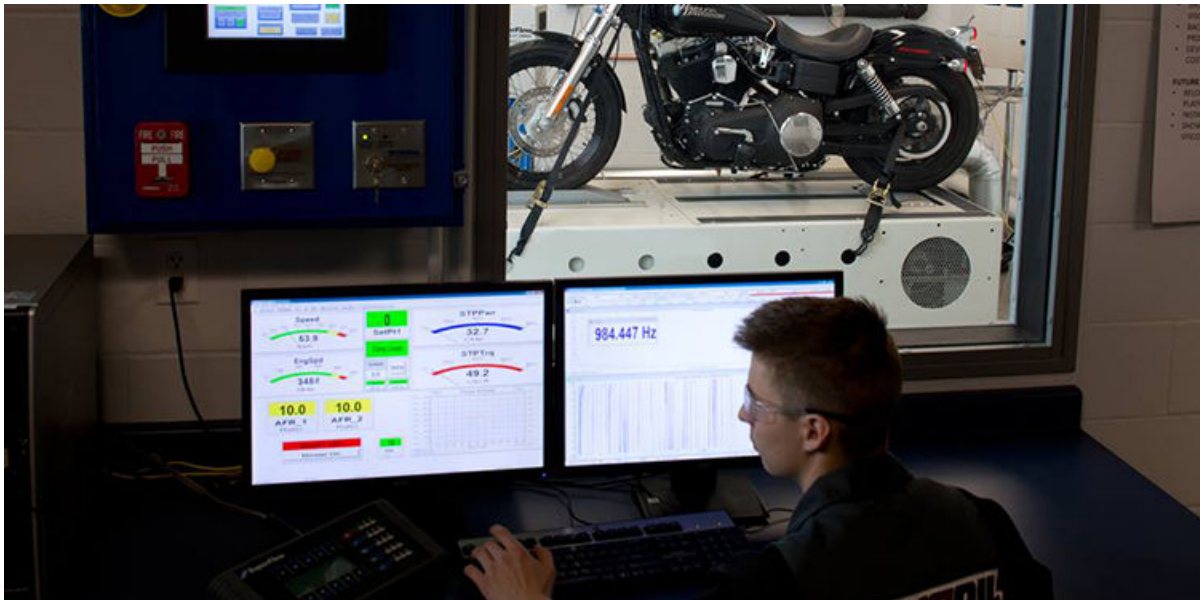


# DATA ACQUISITION FOR CHASSIS DYNAMOMETERS

*SuperFlow's advanced WinDyn Data Acquisition System is available as a conversion kit to upgrade your existing chassis dynamometer. Keep the good mechanical pieces and let SuperFlow upgrade your dyno with more channels, faster sampling rates and enhanced testing features for a fraction of the cost of a new dyno.*



## Overview

Upgrade your existing chassis dynamometer to the latest SuperFlow WinDyn Data Acquisition System and get more data channels, higher sampling rates, modern electronics, precise control and fully custom testing capabilities for a fraction of the cost of a new system. Save your valuable working parts, more often than not, older chassis dynamometers are still mechanically sound, but the data acquisition system is dated and slow. There is no reason to replace the mechanical components that you've already paid to install in your shop. Upgrading to a new WinDyn Data Acquisition System is a cost effective way to make the dyno perform like new, expand its functionality, increase productivity and add revenue possibilities to your business without having to buy a completely new dyno.

## WinDyn

SuperFlow's WinDyn Software is simply the most feature rich software for chassis dynamometers today. We've included all the tools you need to make your chassis dyno a bigger part of your business. WinDyn is preconfigured with industry standard tests to get you up and running quickly. But, we didn't stop there.... We've also included powerful configuration and test editors that offer you complete, customized control



of the dynamometer, the test cell and the tests you're running. WinDyn's available 139 data channels let you measure and analyze data to make your products better. The advanced data acquisition system samples data at 1,000 Hz while WinDyn displays it at 100 lines per second so you're sure to see exactly what's happening with the vehicles your testing. WinDyn's built in data analysis tools let you see data in a way that makes sense, and like the rest of WinDyn, data analysis is user-configurable should you want to change the graphs, plots or overlays. The bottom line is that WinDyn gives you all the tools to make your products thrive.

## Sensor Box

The SuperFlow sensor box is the brain of the 139 channel WinDyn system. Its advanced electronics measures high-resolution data at 1,000 Hz and sends the data to WinDyn for live monitoring. Input channels handle temperature, pressure and air fuel sensors while calculation channels handle formulas, interpolation tables and memory. The included real time weather station uses a barometric pressure transducer, air temperature sensor and humidity sensor to provide constant atmospheric updates to WinDyn so WinDyn can apply the proper correction factor (ECE, DIN, SAE, STP, etc). The sensor box is also the brains behind SuperFlow's legendary closed loop PID control for accurate, loaded testing. Its flexible dual-mode control scheme allows either the dyno or the throttle to control to speed, torque, power,



manifold pressure or any other channel of your choosing. Sophisticated logic lets each controller use up to four different control modes and parameter settings. The sensor box is modular so it can easily be configured for different sensor arrangements, with additional sensor panels or with options like OBDII and emissions measuring equipment. For convenience, the sensor box is mounted on a sturdy, roll-around stand with a five-spoke cast aluminum base and multidirectional casters. It can optionally be mounted on a boom or directly to the wall.

### User Interface

SuperFlow offers two options for control of your SuperFlow chassis dyno. Standard, is the wired handheld controller housed in a rugged impact resistant enclosure. It features an eight-line by forty-character liquid crystal display. Twenty seven keys handle data entry and test setup with ten soft-keys that are automatically labeled for function during each test. The display can show any of a hundred separate measurements in real time and provide the operator with prompts and choices for running the test. Sturdy rubber mounts hold the controller on the steering wheel freeing up your hands to run the dyno and the vehicle. Optionally, NetDyn is a Windows® based software solution that operates wirelessly (TCP/IP protocols) so you are not slowed down by wires. The industrial, touch-screen tablet PC allows you to run the dyno and any tuning software of your choice, simultaneously from the drivers seat. 8 function keys provide a tactile response for crucial test functions while two set point controllers allow for open or closed loop testing. Two dial meters can be configured to monitor any channel being collected in WinDyn®.

### Eddy Current Controllers

WinDyn Conversion Kits are available for all types of eddy current chassis dynamometers. We've put WinDyn Conversion Kits on both air and water cooled eddy current absorbers. By replacing the existing eddy current controllers with our own, we can control any manufacturers' dyno with the same precision and repeatability that SuperFlow dynos are known for.

***Call or email Promand today to discuss your application and dyno test requirements in detail.***

***Email: [sales@promand.com](mailto:sales@promand.com) Call: +614 3011 8253***