



Actual products may differ
from images shown



Upgrade Quickly

Expand functionality and
increase testing capabilities



Versatile

Retrofit dynos from nearly any
manufacturer



Data Acquisition and Control Conversions

More often than not, older dynamometers are mechanically sound, but their data acquisition system is dated and slow. SuperFlow will quickly upgrade the entire data acquisition and control system with modern technology to make the dyno perform like new, expand its functionality and increase your testing capabilities. Because SuperFlow Data Acquisition and Control Systems are extremely versatile they can also retrofit engine and chassis dynos from nearly any manufacturer. By replacing your existing servo valve or eddy current controllers with our own we can control any manufacturers' dyno accurately and precisely. With a data acquisition upgrade from SuperFlow® you can have the legendary accuracy and repeatability that SuperFlow® dynamometers are known for without having to replace all of the mechanical components of your existing dyno. A simple data acquisition upgrade is an easy way to increase the productivity and revenue possibilities of your dyno, for a fraction of the cost of a new system.

Compatibility

Data Acquisition and Control Conversions

Available for These SuperFlow Products

We've always prided ourselves on building machines to last. Fortunately for you we've done that as many of our original 801 and 901 engine dynos are nearly 30 years they're still being used daily. Let us bring your existing SuperFlow dyno up to the latest WinDyn Data Acquisition and Control System for a fraction of the cost of a new system. WinDyn Conversion Kits are already available for the following SuperFlow dynamometers:

SuperFlow Engine Dynos

- SF-901
- SF-902
- SF-3100
- SF-3200
- DTS Powermark

SuperFlow Chassis Dynos

- SF-601
- SF-602

Available for These Manufacturer's Products

You may not own a SuperFlow dyno, but you're not prohibited from the legendary accuracy, repeatability and control that SuperFlow dynos offer. We upgrade many different manufacturers' engine and chassis dynos often. If you're struggling with a dyno that does not repeat, if you fix your dyno more than you test with it, or if you want modern technology, contact SuperFlow® to learn how affordable it is to upgrade your dyno with the latest WinDyn Data Acquisition System and get results you can count on. Below are the dynamometers that we can currently upgrade, however, if your dyno is not listed please contact us; more often than not it's something we can already do.

Other Manufacturer's Engine Dynos

- Stuska
- Go Power
- Froude
- Power Test
- Land & Sea
- AVL

Other Manufacturer's Chassis Dynos

- Clayton
- Maha
- Mustang
- DynoJet
- Dynocom
- Power Test
- DynoDynamics

Standard Equipment

Data Acquisition and Control Conversions



Sensor Box

The SuperFlow® Sensor Box features state of the art electronics to measure, condition and digitize high-resolution data and then broadcast it over an Ethernet network for live display in WinDyn®. 139 input channels handle temperature, pressure lambda and several other third party sensors or devices. 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 right correction factors (ECE, DIN, SAE, STP, etc.). The sensor box also handles closed loop PID (proportional, integral and differential) control for accurate loaded testing, its flexible dual-mode control scheme allows either the dyno or throttle to control to speed, torque, power and manifold pressure. 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.



Control Console

SuperFlow's new control console features a touch screen tablet interface and two 22" LCD flat panel monitors. Two PID controllers allow for either open or closed loop control of throttle and load. Four hardware defined keys take care of ignition, fuel pump, starter and fan control while four programmable buttons are available for functions of your choice. Six available user-defined toggle switches allow more test cell customization. WinDyn® runs on the included PC and handles all the live data monitoring and post test data analysis and graphing. The two 22" monitors make viewing and graphing the data from WinDyn's® 10 unique screens easy and completely customizable.

Optional Equipment

Data Acquisition and Control Conversions

Water Brakes

WinDyn Conversion Kits are available for several different manufacturers engine dynamometers. It doesn't matter if the brake uses inlet control, outlet control or dual valve control, we can do it all. By replacing the existing servo motor(s) with our own, we can control any manufacturers dyno with the same precision and repeatability that SuperFlow dynos are know for.



Eddy Currents

WinDyn Conversion Kits are available for all types of eddy current dynamometers. We've put WinDyn on air cooled eddy currents, water cooled eddy currents and even eddy current chassis dynamometers with 3 power 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 know for.

WinDyn Data Acquisition System

SuperFlow's® advanced WinDyn® Data Acquisition System provides a wealth of pre-defined tests along with a user-friendly test editor to easily write custom tests. Standard tests can be performed and at part or wide open throttle. These include: controlled acceleration, controlled deceleration, step, steady-state, and track lap, break-in and mapping.



Post Test Analysis

The built in post test graphing and data analysis capabilities allow you to view up to 10 user-defined pages in tabular format. When the test is complete, click the graph icon to automatically generate up to 10 different test data plots. Your tabular data and graphical data can appear side by side on the screen for easy comparison. You can also overlay test data to compare it graphically with up to 10 simultaneous overlays.

In-Test Monitoring

WinDyn® offers 10 custom test screens to monitor real-time test data on meters, digital readouts, bar graphs and plots. Real-time data on every screen continuously updates even when the screen is not in actively selected.

Testing Solution Leader

The product that started it all for SuperFlow, a simple device to measure and quantify the amount of air-flow through cylinder head runners and intake manifolds. In the 1970s the goal was to win Formula V races, a hobby of SuperFlow's founder. Today, SuperFlow produces a series of air flow test benches used for things like increasing engine performance and fuel economy, developing catalytic converters and certifying their flow rates at the end of a production line as well as a variety of other air flow test applications across multiple industries.



SuperFlow manufactures water brake, eddy current and AC engine dynamometers for performance and industrial applications. SuperFlow engine dynos test gasoline, diesel and CNG engines and several of our water brake dynos are used for AC motor testing.



We frequently provide custom engineered solutions for unique test requirements. Our engineering team will understand the application, select the appropriate power absorption unit, design all test cell support systems and configure our WinDyn data acquisition and control system to manage the dyno, the engine and the test environment. If you have a standard or unique engine testing requirement contact us and put our 40 years of engine dyno experience to work in your test cell.

SuperFlow offers a complete line of chassis dynamometers for everything from performance tuning to pre-emissions, mileage accumulation and heavy-duty truck testing. Unique features like true all-wheel-drive speed synchronization and trunnion mounted differentials allow our dynos to give you increased load capacity and test duration across the entire operating range. View our models below and give us a call at any time to discuss your project – remember we often design and build custom chassis dynamometers for unique needs.

SuperFlow dynamometers are consistently listed as the most profitable pieces of equipment in modern performance shops.



Superflow® The Industry Standard

SuperFlow® is a global engineering leader specializing in test and remanufacturing equipment for vehicle drivelines. Since 1972, SuperFlow® has been designing and manufacturing industry leading flowbenches, engine dynamometers, chassis dynamometers and advanced Windows® based data acquisition systems. Our products are used daily by performance engine builders, engine and transmission remanufacturers, the U.S. Military and allies worldwide, technical schools, race teams, speed shops, universities, and leading automotive manufacturers to produce powerful and efficient vehicles.

Today, with more than 10,000 products in the field, SuperFlow® is the most experienced manufacturer in the industry offering the most complete selection of test equipment. SuperFlow's® four major brands, Axiline®, Hicklin® Engineering, SuperFlow® and TCRS®, test or rebuild every component of the drive train from the engine and transmission to the torque converter, drive shaft and axles. Our commitment to providing the best products and service at a great value has given us the opportunity to work with some of the most notable companies in the automotive industry. Experience why thousands have trusted SuperFlow® for all of their testing needs.





SuperFlow is part of Power Test, LLC, an industry leader in the design, manufacture and sales of dynamometers, specialized test systems, and related data acquisition and control systems. Power Test, LLC, offers a portfolio of brands that have long been the standard bearer for quality in the testing industry. As your equipment testing partner for innovative products and comprehensive lifecycle services and support, we are dedicated to delivering an exceptional experience by offering specialized solutions to Make Your Testing Easy.

TEST WITH THE BEST™

Chassis Dynos

Flowbenches

DriveShaft Rebuilding Equipment

Engine Dynos

Solenoid Testers

Torque Converter Rebuilding Systems

Transmission Dynos

Valve Body Testers

Transmission Testers