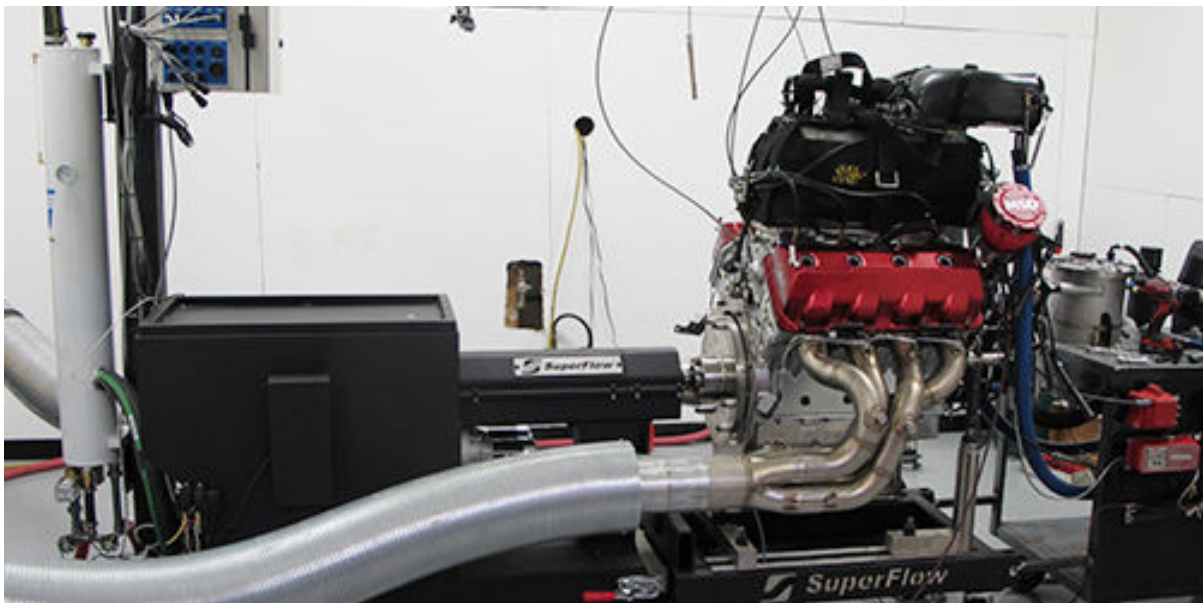


SF-BLACK WIDOW ENGINE DYNAMOMETER

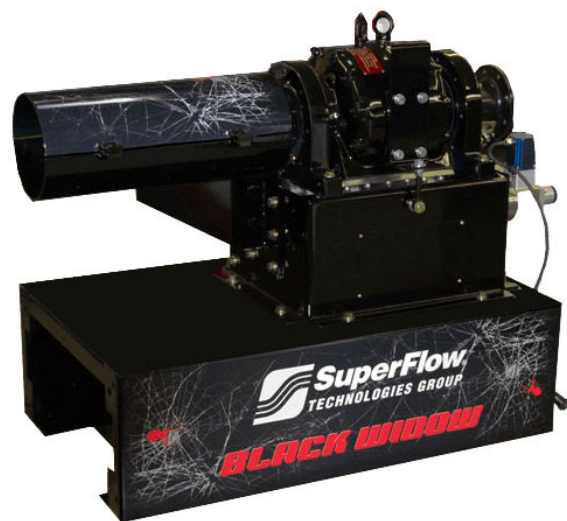
The SF-Black Widow engine dyno is rated for 11,000 RPM, 3,000 HP and 2,500 lb-ft capacity. Its extreme horsepower capacity makes it the dyno of choice for many of today's top Pro Mod engine builders.



Overview

The SF-Black Widow engine dyno from SuperFlow is a breakthrough in versatility and performance among water brake dynamometers. The improved design incorporates the industry leading SF-Powermark dyno base frame and engine cart making engine adaptation simple. With a maximum speed of 11,000 RPM, the SF-Black Widow engine dyno handles anything from high-torque diesel and marine engines to high-revving, high powered Pro Mod drag engines. It is rated for 3,000 HP and 2,500 lb-ft. of torque. Integrated starters mount directly to the dyno so a bell housing, flywheel and engine mounted starter are not required. The torsionally compliant drive shaft connects the engine to the dyno enabling you to run right off the engine's crank shaft while 4.5" constant velocity joints ensure smooth power transfer.

The included roll around engine docking cart offers great versatility to adapt to various types of engine's and its stainless steel runner means easy adjustment of engine supports without any rust. The cart is also compatible with both the SF-Powermark and SF-902S to allow maximum versatility. The tool tray has cutouts for storing spark plugs and lambda probes. To keep the test cell neat, the integrated boom assembly houses both the sensor box and cooling tower, plus it has cable stays to route transducer wires cleanly between the sensor box and the engine. The included non-pressurized cooling tower mounts to the boom assembly behind the dyno, out of the way. The new sensor box also mounts to the boom where it is kept safely away from engine vibrations and heat. WinDyn's® pre-defined test sequences allow for standard tests at the push of a button so you're up and running immediately and the live trace feature lets you see live data as a trace over a saved reference plot.



Product Specifications

Absorber Type	Water brake
Maximum Speed	11,000 RPM
Horsepower Capacity	3,000 HP (2,237 kW)
Torque Capacity	2,500 lb-ft (3,390 Nm)
Temperature	16-Channel thermocouple panel 12 transducers, 1/8" 12 swagelock fittings 12 ten foot extension cables
Pressure	10-channel pressure panel 3 sensors (-15 to 150 psi)
Air / Fuel	2 pre-configured analog inputs, 0-10 VDC
Fuel Flow	2 fuel flow measurement turbines*
Air Flow	1 air flow measurement turbine*

Product Options

Additional Docking Cart

Extra docking cart to save time between engine tests. Pre-stage one engine while another is being tested.



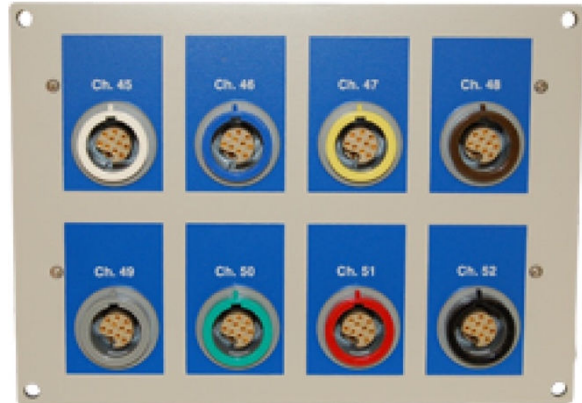
Air Fuel Kit

Air Fuel Meter Kits available in any channel count configuration. Bosch LSU 4.2 and OEM grade NTK type sensors available.



Analog Panel

8 channel analog panel to integrate exhaust gas analyzers lambda sensors, O2 sensors, etc. Select 0-1V, 0-5V, 0-10V, 0-20V or 0-30V in any combination.



Pressure Sensor Expansion Panels

The modular sensor box allows for additional 10-channel pressure panels and additional 16-channel temperature panels. Extra transducers are sold separately.



Temperature Sensor Expansion Kits

Expand your sensor box with a 16-channel thermocouple panel for Type K, Type J or Type T thermocouples. Monitor oil and water temperatures live in our WinDyn software then save the data for easy posttest graphing and analysis.



Blow-By Sensor

Measures the volumetric flow of crankcase blow-by. Two sizes available: 0.4 to 16 ACFM and .25 to 10 ACFM. Select either analog or frequency output.



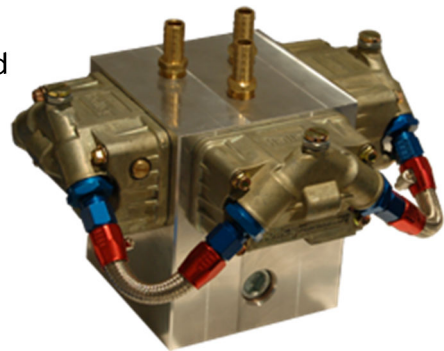
Engine Adapter

Multi-fit adapter packages for the SF-902S, SF-Powermark and SF-BlackWidow. Multi-fit Bell Housing pictured for SF-902S. Universal Engine Mounting Kit available for SF-Powermark and SF-BlackWidow.



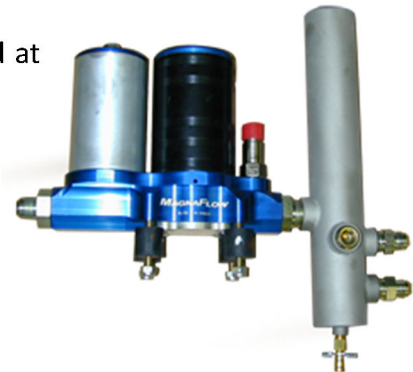
Fuel Canister

Designed to measure fuel consumption of fuel injected engines. Mid flow unit available in 20-270 lb./hr. High flow unit available in 30-1070 lb./hr. Available for gas and alcohol.



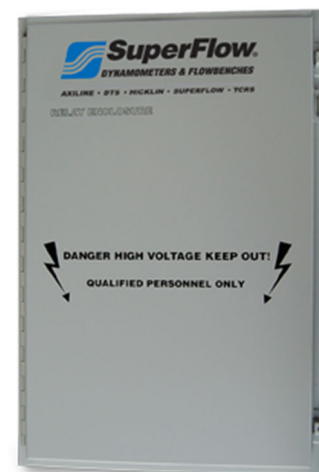
Fuel System

High performance fuel pump and two fuel regulators. Rated at 0-800 lb/hr.



Relay Box

Relay enclosure for up to 32 programmable user-defined relays. Commonly used to control lights, pumps, water systems, emergency stop and fire safety systems.



SuperStart

Starter option for the SF-902S includes 8" spacer box and 2 high torque starters.



CT-700 Pressurized Cooling Tower

CT-700 Pressurized Cooling tower integrates seamlessly with boom assembly. Standard temperature ranges from 160 F to 230 F. Rated for continuous duty testing up to 700 HP (522 kW)



Throttle Actuator

Rotary electric throttle control provides automated testing from computer. Morse cable options also available.



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

Email: sales@promand.com Call: +614 3011 8253