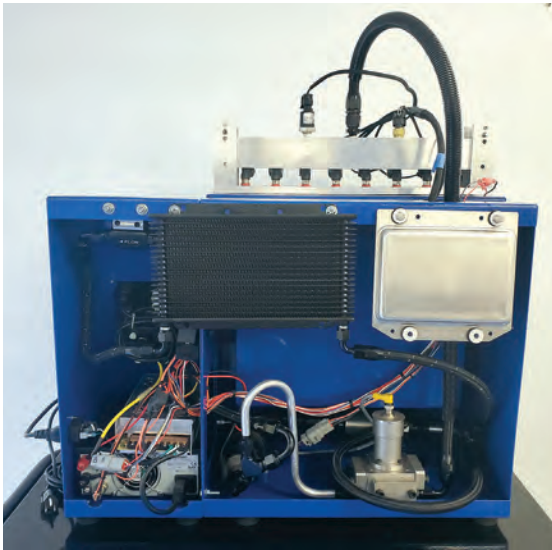


Benefits

- Measure flow through a single set of fuel injectors across a wide range of operating points
- Fits both shop counters and rolling carts
- Supports GM, Ford, Chrysler, Bosch (VW/Audi, Mercedes), Subaru, Honda, and Nissan ECUs

Return on Investment

Calibrated Success has led the industry in independent fuel injector testing and characterization. Using this bench and online tool, we offer single-set characterization services for \$389. By charging the same rate, bench owners can completely recover the \$18,400.00 equipment purchase price by performing this service for 50 customers. Used just once a week, the bench pays for itself in under a year. As a shop owner, the bench offers the opportunity to deliver \$389 in billable labor in just 30 minutes to each job while saving you on valuable dyno time later too.



MD[®] MUSTANG DYNAMOMETER

About Mustang Dynamometer

For over 45 years, Mustang Dynamometers has been a leading manufacturer and designer of the highest quality, most accurate chassis dynamometers for the performance market and emission testing programs worldwide. Our sister company, Mustang Advanced Engineering, has created world leading testing solutions for advanced hybrid and electric vehicle development, wind turbine gearbox testing, military vehicle development test stands and advanced testing and simulation systems for tomorrow's future technologies. Visit MustangDyne.com and MustangAE.com for more information. Follow them on Facebook, Twitter, LinkedIn, and Instagram.



Injector Test Bench



Mustang Dynamometer has partnered with Calibrated Success



(330) 963-5400 • Sales@MustangDyne.com

Mustang Dynamometer

2300 Pinnacle Parkway
Twinsburg, OH 44087
Phone: (330) 963-5400
Fax: (330) 425-3310
Email: Sales@MustangDyne.com
MustangDyne.com



© 2022 Mustang Dynamometer
MDY-0020-TrF1_v1-1022

MD[®]
MUSTANG
DYNAMOMETER

Specifications

Dimensions

28" x 30" x 16" (W x H x D)

Weight

87 lbs dry, 135 lbs shipping weight including dunnage

Power Requirements

110v AC 60Hz single phase, less than 15A

Fluid Requirements

Use clean N-Heptane only, not provided by Calibrated Success. Use of other fluids may be dangerous, harm bench or provide poor data quality. Reservoir capacity is 5 liters.

Environmental Requirement

Testing room temperature should be 60-80° F for best results. Ventilation and fire suppression capability required for use of N-Heptane fluid.

Flow Testing Range

300-3000 cc/min x 4 injectors simultaneously. Higher flow rates possible with modified testing procedure and additional data processing by Calibrated Success for a nominal fee.

Accuracy

Our flow meters are typically certified to < 0.2% error. Overall average calibration values are within 1% of samples tested, depending upon individual injector variations to the average.

Output Data Formats

Direct plug and play data available for GM, Ford, Chrysler, Bosch (VW/Audi, Mercedes), Subaru, Honda, and Nissan ECUs. Standalone aftermarket ECUs are also supported with universal data for flow rate and offset.

What Does it Do?

The Calibrated Success Injector Test Bench has the ability to precisely measure flow through a single set of fuel injectors across a wide range of operating points. Using this data, our online tool calculates the exact plug and play ECU calibration values needed to match those injectors on the vehicle. This eliminates one of the biggest potential sources of error when tuning EFI systems. Starting with precise injector characterization data, all future calculations for lambda (air-fuel ratio), air flow, volumetric efficiency, engine load, and torque estimates become more accurate as well.

Why Should My Shop Buy One?

Starting with accurate fuel injector data will speed up the tuning process on the dyno. In particular, low pulse width operation points such as idle and part throttle cruising are heavily impacted by the accuracy of the offset and non-linearity values for the injectors used. By using correct values, the tuner can be confident that fuel delivery is always on point and concentrate upon improving things like VE or MAF surfaces in the ECU without "baking in" errors that could not be seen previously. The net result is a reduction in the time it takes to develop the correct VE and MAF tables for each vehicle on the dynamometer. Each airflow measurement and adjustment is now based upon exact fuel delivery measurements for the specific set of injectors tested, so fewer corrections are needed to find the right answer. As a side benefit, emissions and fuel economy are often improved as well.

Fuel Injector Test Bench

How Long Does Testing Take?

The characterization test itself takes only 7 minutes to perform after an initial 7-minute break-in procedure. An optional 2-minute flow match testing procedure is also available. Data is uploaded to our online tool and processed almost immediately for delivery to your inbox. In total, an unknown set of injectors can be validated as matched and completely characterized in less than half an hour.

Can I Work on It?

Proudly made in the USA, our benches use high quality components throughout. Although issues are rare, most shops will find that they already have everything they need on hand to perform basic maintenance on the bench. Each bench is built with a high flow DeatschWerks pump, billet pressure regulator, and replaceable 10 micron filter. All fluid lines have rugged -AN fittings for easy service.

