The Tough Small Engine Dyno

The D100 dynamometer is constructed of high-strength aluminum alloy. This lightweight, compact unit can be operated from a typical water supply for use anywhere. Its versatility makes it ideal to test go-kart engines, APU's, outboard marine engines and is often used for industrial component durability testing. Additionally, the D100 is the choice dynamometer of many student SAE teams around the world.

The ease of use, when combined with a Go Power Systems instrumentation package, allows the user to achieve precise testing and results with minimum set-up time.

Go Power’s unique modular design provides maximum flexibility and allows a custom design that exactly fits your needs. Our expandable, modular approach allows you to add to your system as your testing requirements change.
Main Specs

- MAX POWER: 100 Bhp (75 kW)
- MAX TORQUE: 66 lb ft (90 Nm)
- MAX SPEED: 14,000 rpm

D100 Features

- Portable, Quick Set Up, Low Maintenance
- Durable, Powder Coated Finish
- Test horizontally or vertically
- Long Service Life
- Spare Parts Available
- Low Facility Water Consumption

Test Packages Available

The EDP100 Essential Dynamometer System Package:
- D100 Dynamometer
- Torque calibration arm assembly, weights not included
- Manual load control valve set
- DC200 digital display console (displays RPM, Torque, HP)
- Interface harness kit

(Note: dyno should be calibrated every 6 months)

The ADP100 Advanced Dynamometer System Package:
- All of the above, substituting a GPS6000 data acquisition system in place of the DC200 display console.

The RDP100 Remote Dynamometer System Package:
- All of the components in the ADP package, substituting a servo load control valve in place of the manual load control valve.

Specifications

- Type of absorption: water brake
- Construction: high-strength aluminum alloy
- Lubrication: greased bearing
- Operating range: 14,000 rpm continuous, with seal kit
- Rotation direction: clockwise or counter-clockwise
- Torque sensor: strain gauge load cell
- Speed sensor: 60 tooth gear with inductive pulse pickup
- Mainshaft: 3/4 in hardened stainless-steel shaft with keyway
- Mounting brackets interchangeable to allow horizontal or vertical testing configurations

Water Requirements

- Inlet: 1/2 in (13 mm), 10 gpm (38 lpm) flow @ 100 HP
- Outlet: 1/2 in (13 mm) gravity drain to atmosphere
- Dynamic pressure: 35 PSI (2.5 bar)

Dynamometer includes:

- Strain gauge load cell
- Speed sensor
- Inlet/discharge hoses 15 ft (4.5 m)
- Barbed hose couplings

Engine Adaptation

A coupling is required to interface with the engine and is dependent on the engine under test. Each coupling situation is unique—we can help you find the correct engine adaptation solution.

Dimensions/Shipping Info

- Width: 11 in (28 cm)
- Height: 11 in (28 cm)
- Depth: 8 in (20.3 cm)
- Weight: 26 lbs (12 kg)

Further Information:

Froude, Inc.
41123 Jo Drive, Novi MI 48375
+1 248.579.4295
sales@froudedyno.com
gopowersystems.com

Manufacturing and Support:

Froude, Ltd.
Blackpole Road
Worcester WR3 8YB UK

We keep you testing.