

DESK-TOP DYNAMOMETER SYSTEM



This "Desk Top" Dynamometer is a complete eddy current dynamometer system designed for use in student teaching laboratories. It can be provided with a Honda GX35 4-stroke engine, AC or DC electric motors. The air-cooled eddy current dynamometer requires no external cooling lines, and is easy to install and use. The sophisticated controller can operate the dynamometer from the front panel or from a computer via the remote mode. Control modes include Manual Load, Speed, Torque and Road Load control. Software provided allows logging of speed, torque and load and additional inputs can be used for measuring engine temps and fuel flow, or motor voltage and current. A throttle position controller is included which outputs an analog Throttle Position command. Student laboratory exercises and teaching material are included.

FEATURES

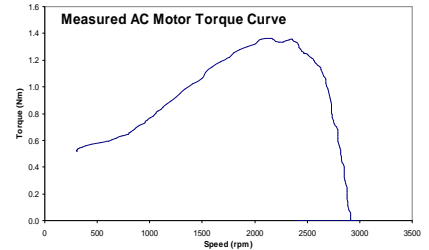
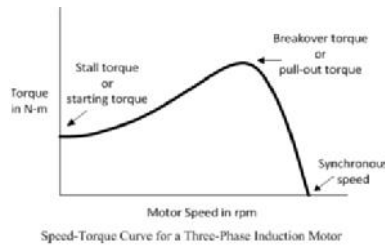
- ICE Dynamometer weighs only 17kg
- 2kW mechanical power absorption
- ICE, AC and DC motors available
- Motors/Engine can be quickly changed
- Integrated DAQ Input Channels for Logging
- Power is Circuit Breaker Protected
- Free computer software for Graphic Display
- 1 Year Warranty Included



Laboratory Exercise Manual Included with Labs, Quizzes and sample data

DESK-TOP DYNAMOMETER SYSTEM

Model DTD-5



AC Motor Dynamometer

Theoretical and measured AC Induction Motor Torque Curves

SPECIFICATIONS

PHYSICAL

Weight: 13, 14, 17kg (DC, AC, ICE)
LxWxH: 500 x 160 x 170 mm

MAINS POWER

Voltage: 120/240VAC
Frequency: 50/60Hz
Current Draw: 4A max

CONTROLLER OUTPUT

Controller Power: 200W (50V, 3A)

DYNO

Mechanical Power: 2kW max
Disk: 200mm diam., 6mm thick
Speed: Hall Effect type, 5V excitation

Load Cell: 4 pulse per revolution
5V Zero-peak
10,000 rpm maximum
20Nm, 200 to 500 ohm
4-wire Wheatstone bridge
5 or 10V excitation
Baud, Bits, Parity, Stop:
9600, 8, N, 1

ENVIRONMENTAL

Temp: 10 to 40° C Operational
0 to 50° C Non-Operational
Humidity: 5 to 90% Non-condensing
Shock/Vibe: <10g

The Desktop Dynamometer is widely used by student laboratories in Universities and Polytechnics. It comes with an extensive library of Laboratory exercises, including sample data, physical explanations and quiz questions and answers.

