

# DX Series Engine Dynamometers



## **Durability**

Taylor Dynamometer's water brake style engine dynamometers are known for their longevity. Taylor builds every one of its products with heavy-duty components and then supports each with legendary service. The end result is a track record of proven durability and satisfied customers.

Taylor Dynamometer has been manufacturing waterbrake

(hydraulic) style dynamometers since the 1920's. Commonly referred to as hydraulic dynamometers, waterbrake dynamometers are particularly well suited for steady state, step, sweep and moderate to slow transient testing requirements. Waterbrake style engine dynamometers are known to have a low acquisition cost, low inertia, require limited maintenance and provide excellent durability.

### **Performance**

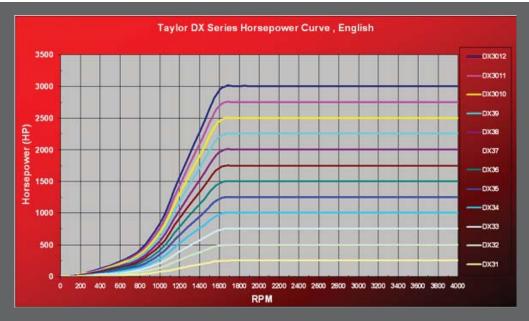
The rotating torque from the prime mover is absorbed by the turbulence (water shear and momentum exchange) of the water within the dynamometer. This braking action or load is developed by a rotor that directs the water against the stator. The stator in turn redirects the water back against the rotor, thereby, opposing the motion of the rotor. The greater the flow of the water through the dynamometer, the greater the braking action or load on the prime mover.

# The DX Series of Dynamometers

Our DX series includes 12 different models all sharing the same design and construction. The power absorption capacity across the product line is changed by adding rotors and stators.

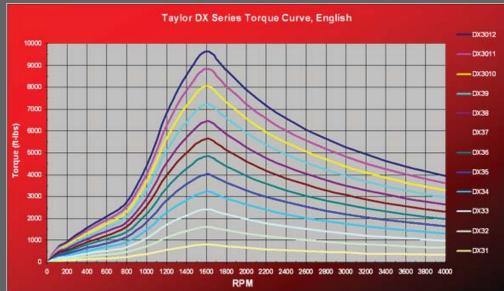
The DX series of dynamometers can be operated in both directions of rotation.

	Model	Max Speed	Max Power
5	DX31	4,000	250
	DX32		500
	DX33		750
	DX34		1,000
	DX35		1,250
E	DX36		1,500
	DX37		1,750
	DX38		2,000
	DX39		2,250
	DX3010		2,500
	DX3011		2,750
	DX3012		3,000



The DX series accommodates power ranges from as little as 25hp to 3,000hp (19kW to 2,237kW) and can operate at up to 4,000 rpm.

With peak torque of up to 9,651 ft-lbs (13,084 Nm) @ approximately 1,600 rpm.



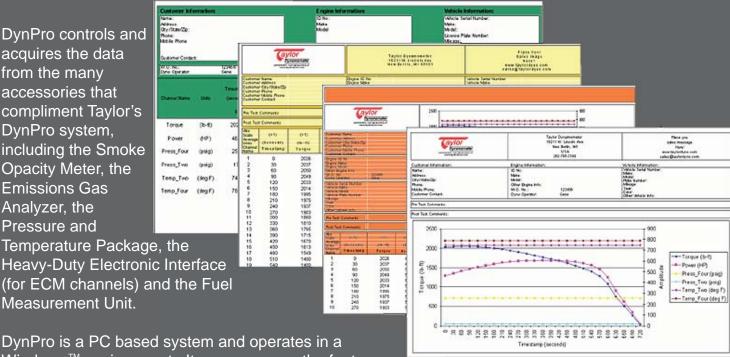
# **DynPro Data Acquisition & Control System**

The making of a truly exceptional dynamometer system requires an exceptional dynamometer data acquisition and control system.



DynPro provides the flexibility and control required in today's challenging test environment, gives the operator complete control of the dynamometer functions and provides comprehensive data acquisition. DynPro controls and acquires the data from the many accessories that compliment Taylor's DynPro system, including the Smoke Opacity Meter, the **Emissions Gas** Analyzer, the Pressure and Temperature Package, the Heavy-Duty Electronic Interface

Measurement Unit.



DynPro is a PC based system and operates in a Windows<sup>™</sup> environment. It encompasses the features

of a lab grade control system and still delivers an operator friendly point and click interface.

### Accessories

On each of our engine dynamometers, Taylor provides the option of including: driveshafts, torsional couplings, flywheel adapter plate kits, shaft guards, prefab sub-bases and more.

Taylor Dynamometer offers a full compliment of accessories to support your testing requirements.



Ask a Sales Representative for information on accessories such as:

\*Driveshaft

\*Flywheel Adapter Kit

\*Exhaust System

\*Sub-base

\*Cooling Column

\*Guard

\*Hose Kit

\*Engine Cart

\*Charge Air Cooler

\*Water Recirculation System

\*Air Handling (HVAC) System

\*Modular Sound Proof Test Cell

and more....

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