



# DA Series Engine Dynamometers

Engine Dynamometer



## Durability

Taylor Dynamometer's air-cooled AC style engine dynamometers are known for their longevity. Every one of our products is designed with heavy-duty components and supported with legendary service. The end result is a track record of proven durability and satisfied customers.

Taylor Dynamometer has been manufacturing dynamometers since the 1920's. AC dynamometers are well suited for steady state, step, sweep, transient and motoring test requirements. These air-cooled AC style engine dynamometers have a higher acquisition cost than most other types of dynamometers but can provide you with the ability to absorb and motor the unit under test. If you intend to be operating the unit on a regular basis for extended periods of time, the payback by using regenerative power capabilities can make the return on the investment look very attractive even if you do not require the dynamic load control capabilities of an AC dynamometer.

## Performance

The rotating torque from the prime mover is absorbed by the electromagnetic braking within the dynamometer. This braking action or load is developed by a rotor that is being acted upon by the electromagnetic force from the coils in the stators. The electromagnetic force between the coils in the stators and the rotor oppose the rotating motion of the rotor. AC dynamometers offer the capability of dynamic load control (motoring and absorbing). When absorbing, the AC dynamometer is generating electrical power that must be either burned off with a load bank or dumped back onto the power lines where at the very least you are reducing your electrical bill and recovering some of your investment.

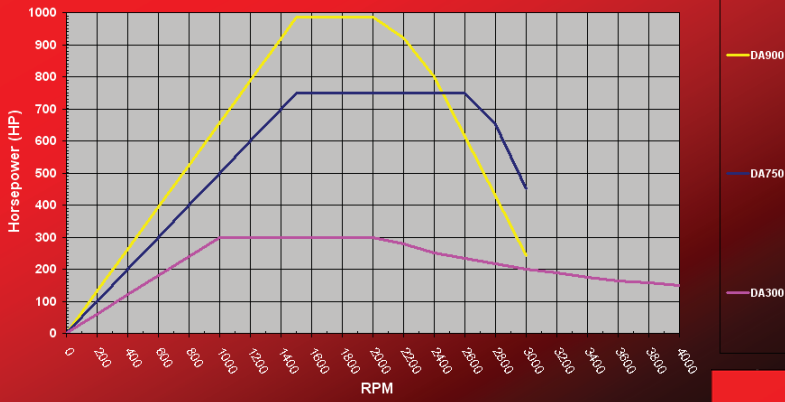
## DA Series of Dynamometers

Our DA series includes 4 different models all sharing a similar design and construction.

Model	Max Speed	Max Power
DA50	10,000	50hp (37kw)
DA300	4,000	300hp (224kw)
DA750	3,000	750hp (559kw)
DE900	3,000	985hp (735kw)

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

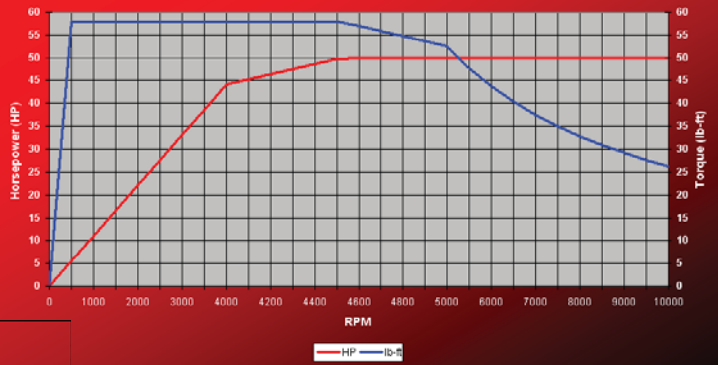
Taylor DA Series Horsepower Curve , English



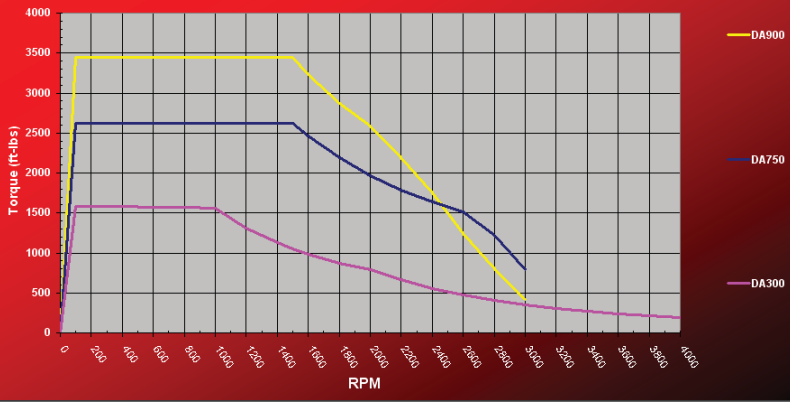
The DA series accommodates power ranges from as little as 2hp to 985hp (2kW to 735kW) and can operate at up to 10,000 rpm.

With peak torque of up to 3,449 ft-lbs (4,676 Nm) @ approximately 100 rpm.

DA50 (English)

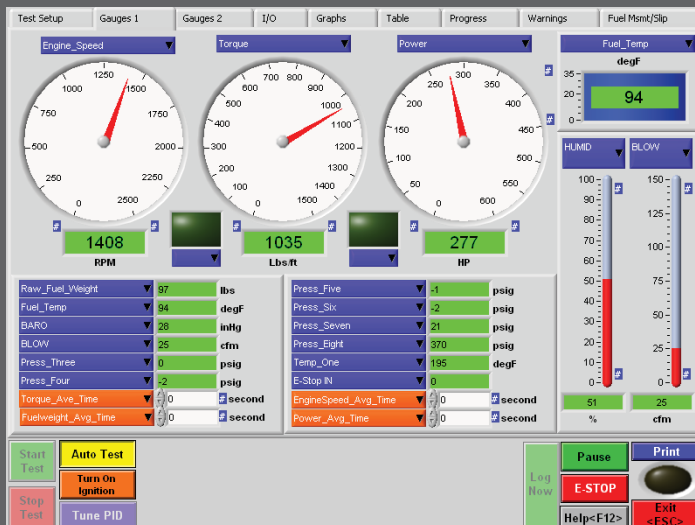


Taylor DA Series Torque Curve, English



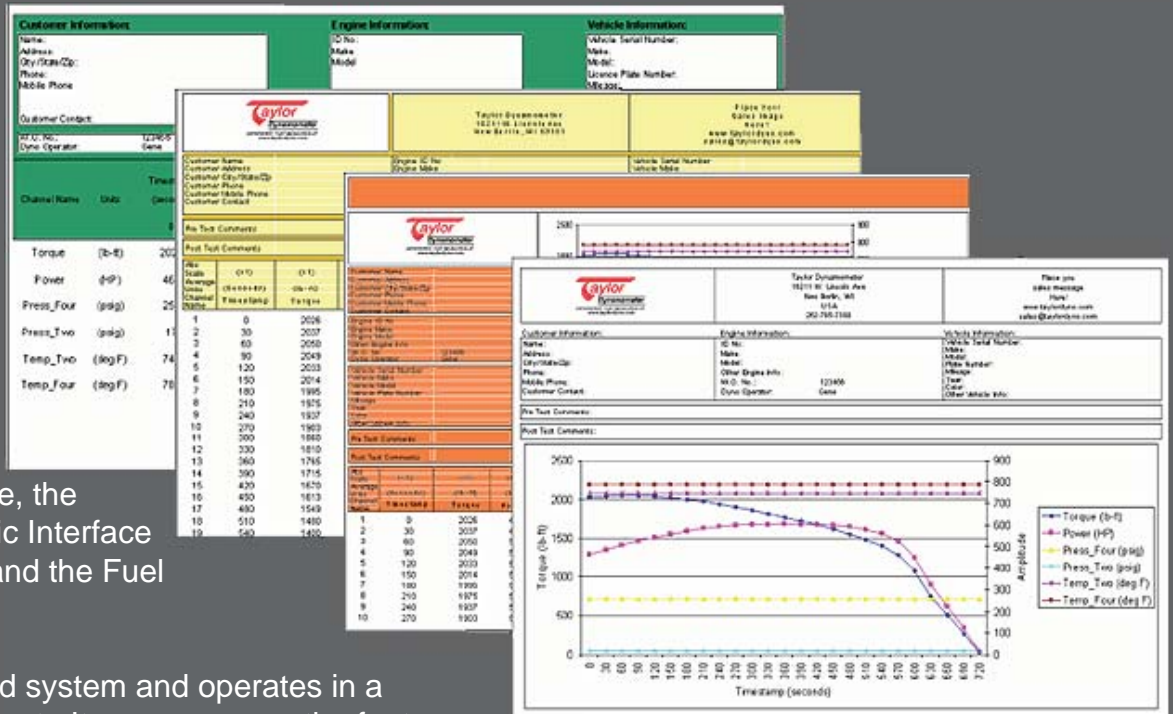
## DynPro Data Acquisition & Control System

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 (for ECM channels) and the Fuel Measurement Unit.



DynPro is a PC based system and operates in a Windows™ 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
- \* Exhaust System
- \* Cooling Column
- \* Hose Kit
- \* Charge Air Cooler
- \* Water Recirculation System
- \* Air Handling (HVAC) System
- \* Modular Sound Proof Test Cell
- \* Flywheel Adapter Kit
- \* Sub-base
- \* Guard
- \* Engine Cart

and more....