

# Eddy Current Dynamometers

## Air Gap Eddy Current Dynamometers



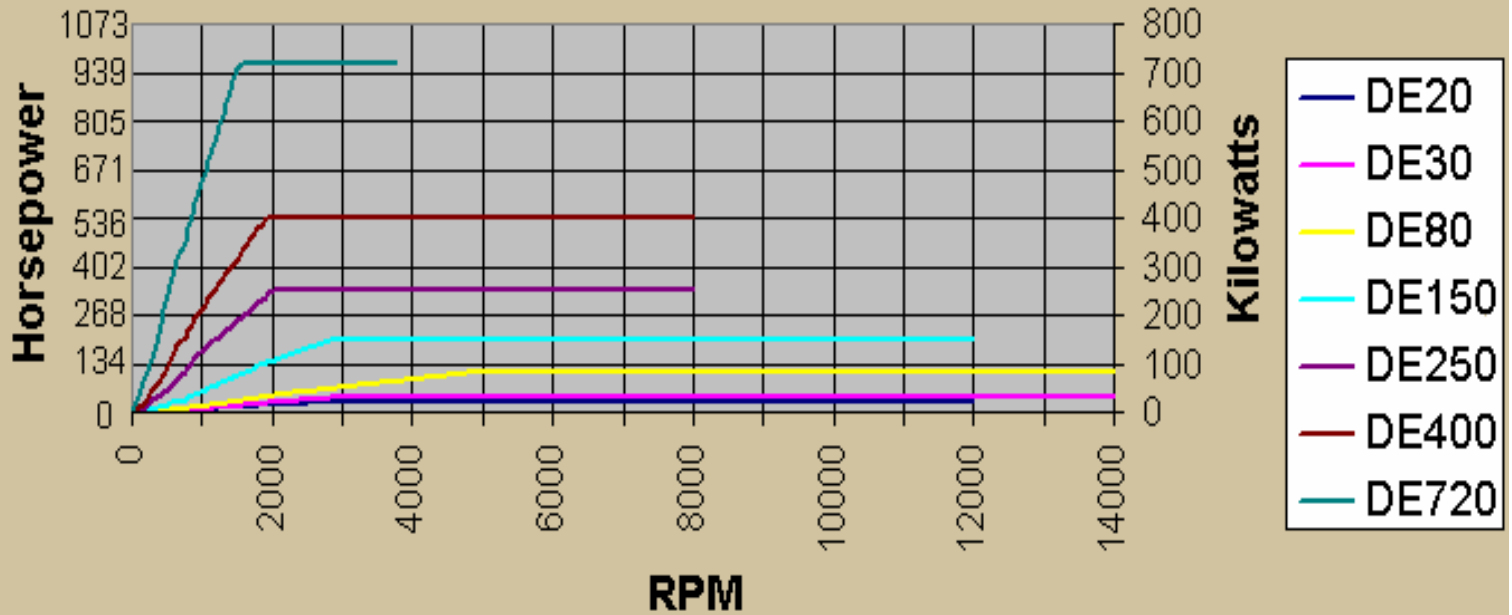
The DE series Air Gap Eddy Current Dynamometers are designed for testing engines to 966 hp (720 kW). These are low inertia, water-cooled Eddy Current Dynamometers designed to provide our customers with a precise, robust and repeatable alternative to water-brake technology. An Eddy Current Dynamometer produces braking torque using the principle of eddy currents induced on a rotating metallic disk, immersed in a magnetic field. All of our Eddy Current Dynamometers include a strain gauge load cell to provide torque measurement capabilities for precise test and development applications. A variable reluctance (Magnetic Pickup) sensor and 60 tooth gear are provided for sensing speed (rpm). These units are built to last. The rugged design of the power absorbing system ensures a long operating life, even in the most demanding applications and environments. The long life and ruggedness of the product is further enhanced by the nickel plating of critical components in contact with the cooling water.

### Standard Features:

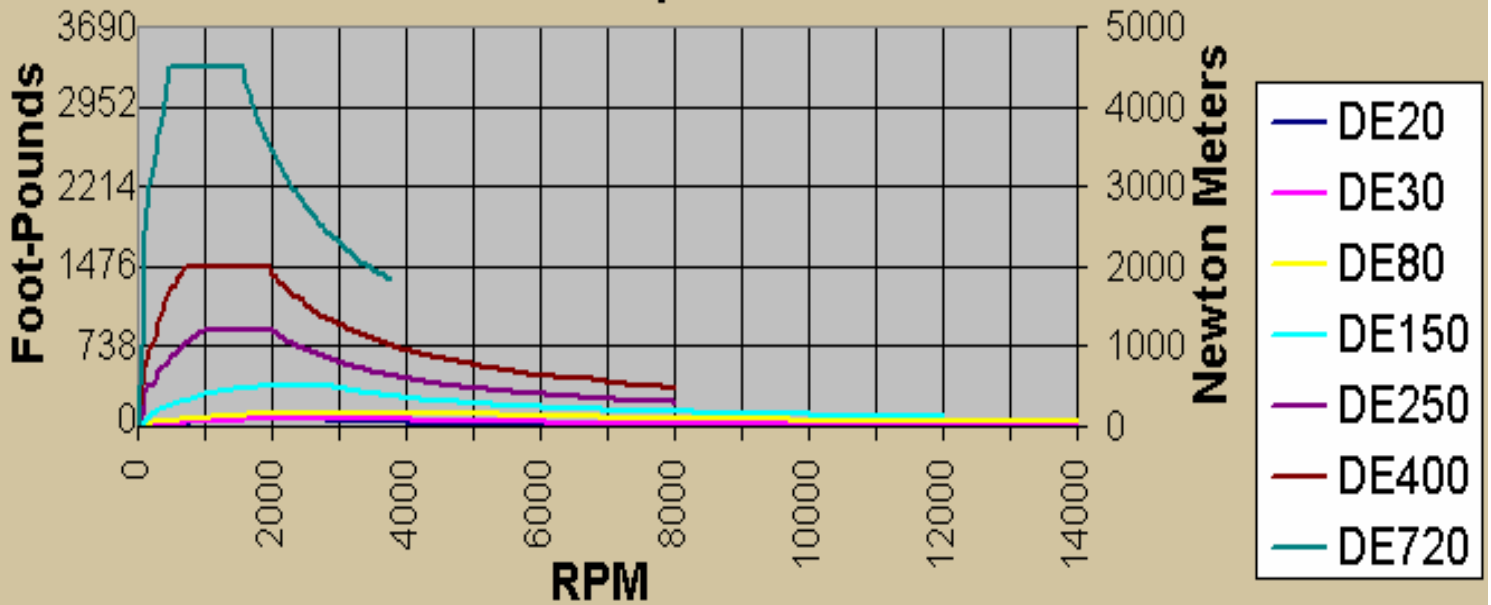
- Two field coils encapsulated in silicon rubber, with central ventilation for reliability in extreme conditions.
- The absorber assembly is mounted in a deep groove, low friction trunnion ball bearings.
- Nickel Plating of cooling passages to ensure corrosion free operation.
- 'O' Ring articulated pipe connections for minimum torque calibration effects from cooling water supply pressure variations.
- 'Fail Safe' flow sensor cooling water safely.
- Loss plate thermocouples for additional cooling water safely monitoring and/or coolant flow control.
- Low inertia spoke rotor design.
- Fast response field coil designed for field forcing.
- Bi-directional operation.

| MODEL                 | MAX RPM | MAX HP |
|-----------------------|---------|--------|
| <a href="#">DE20</a>  | 12000   | 27     |
| <a href="#">DE30</a>  | 14000   | 40     |
| <a href="#">DE80</a>  | 14000   | 107    |
| <a href="#">DE150</a> | 12000   | 201    |
| <a href="#">DE250</a> | 8000    | 335    |
| <a href="#">DE400</a> | 8000    | 536    |
| <a href="#">DE720</a> | 3750    | 966    |

## DE Series Horsepower Curves



## DE Torque Curves

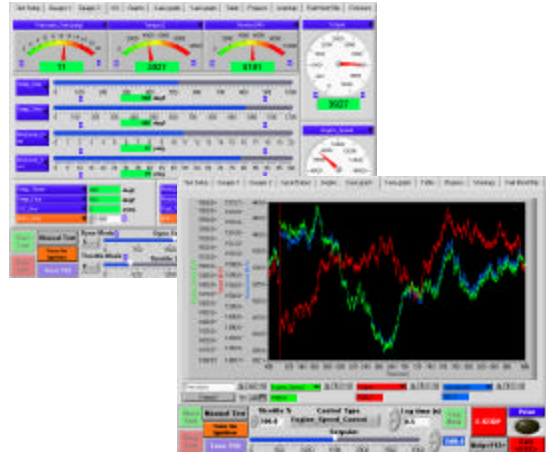


## Accessories

Taylor Dynamometer provides a full line of accessories for your eddy current dynamometer.

- Eddy Current Dyno Controllers
- 1100/1500/1700-style driveshafts
- Adapter plate kits
- Shaft Guards
- Base Kits
- 6,000 lb Engine Carts
- Charge Air Coolers
- Cooling Columns
- DynPro Data Acquisition & Control Software
- Calibration Weights
- Throttle Controls
- Closed Loop Cooling Center
- Ignition Power Supply
- Electric Starter Power Supply
- Exhaust Systems
- Make Up Air Systems
- Fuel Options

### DynPro Data Acquisition Software



Taylor Dynamometer also has:

#### Custom Water Recirculating Systems

- Each system tailored to local weather conditions, dynamometer size and room configuration
- Improves dynamometer performance, reduces operating costs and minimizes environmental impact

#### Installation Services

#### Dynamometer Rebuilding Services

#### Unlimited Customer Phone Service

#### On-Site Repair Services



**Cooling Column**