

## DM-8102 / Engine Dynamometer



Example Model Shown  
(Image may not depict all standard  
included components)

## DM-8102 Eddy Current Dynamometer

### Specifications

|                                 |   |
|---------------------------------|---|
| Power:                          | 450 hp (336 kW)                                   |
| Max Torque at Base Speed:       | 762 lb-ft (1,034 Nm)                              |
| Base Speed:                     | 3,100 rpm   |
| Max. Speed:                     | 6,000 rpm   |
| Construction Type:              | Wet Gap   |
| Rotor Inertia:                  | 17.7 lb-ft <sup>2</sup> (0.75 kg-m <sup>2</sup> ) |
| Coolant Required at Max. Power: | 45 gpm (170.3 lpm)                                |
| Coolant Inlet (Min-Max):        | 55-100 psi (378-689 kPa)                          |
| Coolant Inlet Temperature Max:  | 90°F (32.2°C)                                     |
| Shipping Weight (estimate):     | 2,200 lb (998 kg)                                 |
| Companion Flange / Hub Pattern: | 1550 - US Customary                               |
| Coil Voltage / Hot Amperage:    | 90V / 7.3 amps                                    |
| Rotation:                       | bi-directional                                    |

*For overhung loads, such as a belt or gear drive, please contact Dyne Systems to ensure that the system will meet the required performance needs.*

### Recommended Accessories

- Driveshaft - 1550
- Torsional Coupling - 1550
- Flywheel Adapter Plate Kit
- Driveshaft Guard
- Sub-Base Kit
- Engine Cart
- Air or Electric Starter
- Engine Cooling Column
- Charge Air Cooler
- Water Recirculating System

# Optional Accessories



Optional Manual Shaft Lock



Optional Closed Loop Cooling Center



Optional Charge Air Cooler



Optional Driveshaft Guard



Optional Engine Cart

# Various Facility Support Systems and Services Available



Bulk Fuel Storage and Distribution



Coolant Storage and Distribution



Water Recirculation

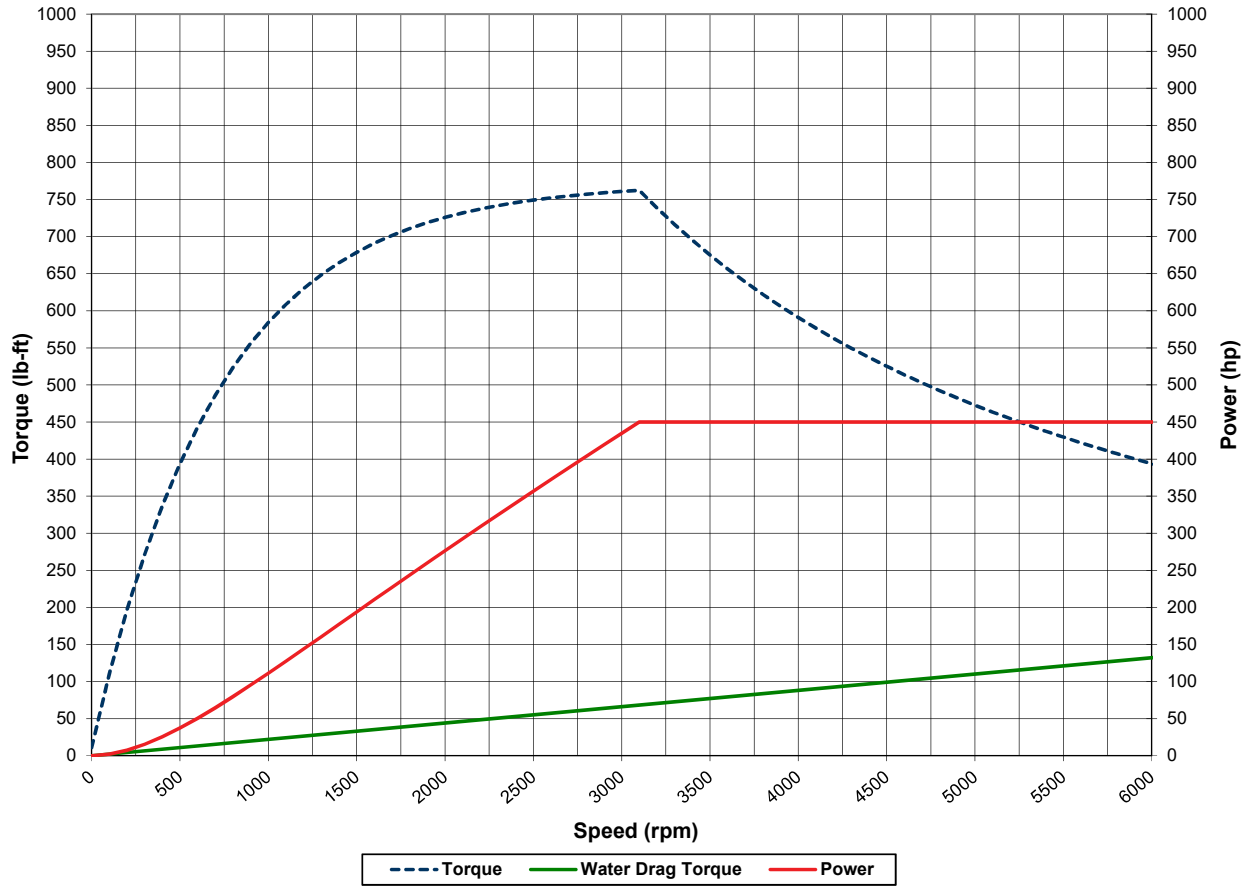


Design, Project & Construction Management Services

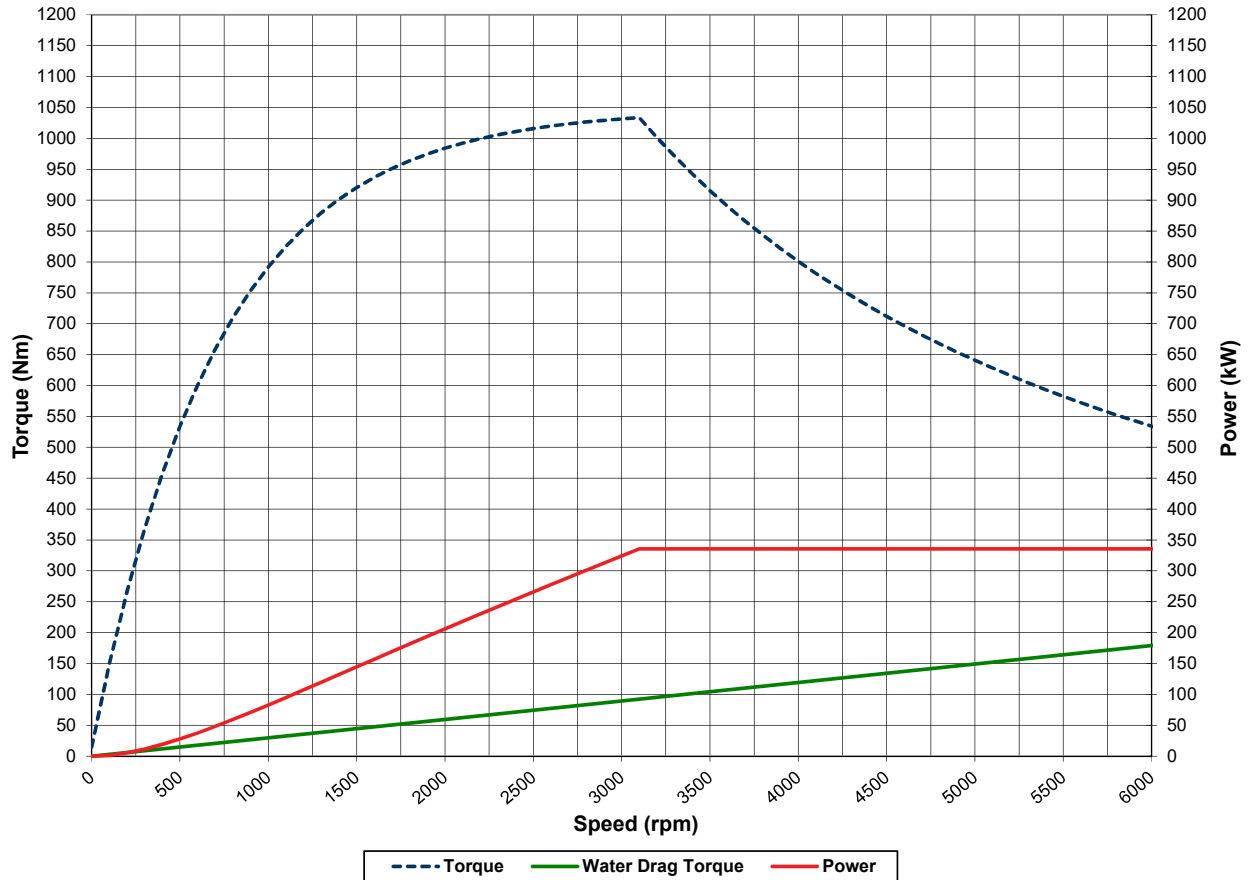


Commissioning, Start-up & Training

DM-8102 (US Customary)



DM-8102 (S.I.)





Note: Shown without companion flange

| Units        | A   | B    | C     | D    | E     | F   | G    | H   | J    |
|--------------|-----|------|-------|------|-------|-----|------|-----|------|
| US Customary | 39  | 19.5 | 13.75 | 27.5 | 18.88 | 20  | 31.6 | 15  | 11.6 |
| S.I.         | 991 | 495  | 349   | 699  | 480   | 508 | 803  | 381 | 295  |

| Units        | K    | L    | M     | N    | P   | Q   | R   | U    | Y    |
|--------------|------|------|-------|------|-----|-----|-----|------|------|
| US Customary | 5.15 | 23.2 | 12.75 | 25.5 | 9.5 | 30  | 19  | 2.25 | 0.88 |
| S.I.         | 131  | 589  | 324   | 648  | 241 | 762 | 483 | 57   | 22   |

(All dimensions are for new OEM supplied units)

## Standard Included Components

- Load Cell and Linkage
- Cooling Safety Package
- Calibration Arm
- Calibration Weight Hanger
- Companion Flange / Hub Pattern 1550 - US Customary
- Shaft End Guard
- Magnetic Pickup and 60-tooth Gear
- Constant Level Oilers

*As a safety precaution, Dyne Systems recommends a torsional analysis to uncover any potential torsional problems that exist for each application. This analysis will identify any torsional issues (frequencies) that should be fixed prior to operation. Excessive linear vibration may also create problems that must be mitigated for continued operation. It is the customer's responsibility to ensure that these vibration issues are addressed upon application of the dynamometer. Equipment failures attributed to linear or torsional vibration are not warrantable.*

**Everything you need to succeed**



Dyne Systems is a division of Taylor Dynamometer  
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