

## DM-8163HS / Engine Dynamometer



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

## DM-8163HS Eddy Current Dynamometer

### Specifications

|                                 |  |
|---------------------------------|--|
| Power:                          | 1,500 hp (1,119 kW)                              |
| Max Torque at Base Speed:       | 3,751 lb-ft (5,086 Nm)                           |
| Base Speed:                     | 2,100 rpm  |
| Max. Speed:                     | 6,000 rpm  |
| Construction Type:              | Wet Gap  |
| Rotor Inertia:                  | 183 lb-ft <sup>2</sup> (7.71 kg-m <sup>2</sup> ) |
| Coolant Required at Max. Power: | 150 gpm (567.8 lpm)                              |
| Coolant Inlet (Min-Max):        | 55-100 psi (379-689 kPa)                         |
| Coolant Inlet Temperature Max:  | 90°F (32.2°C)                                    |
| Shipping Weight (estimate):     | 7,000 lb (3,175 kg)                              |
| Companion Flange / Hub Pattern: | 1810 - US Customary                              |
| Coil Voltage / Hot Amperage:    | 90V / 11.81 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 - 1810
- Torsional Coupling - 1810
- 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

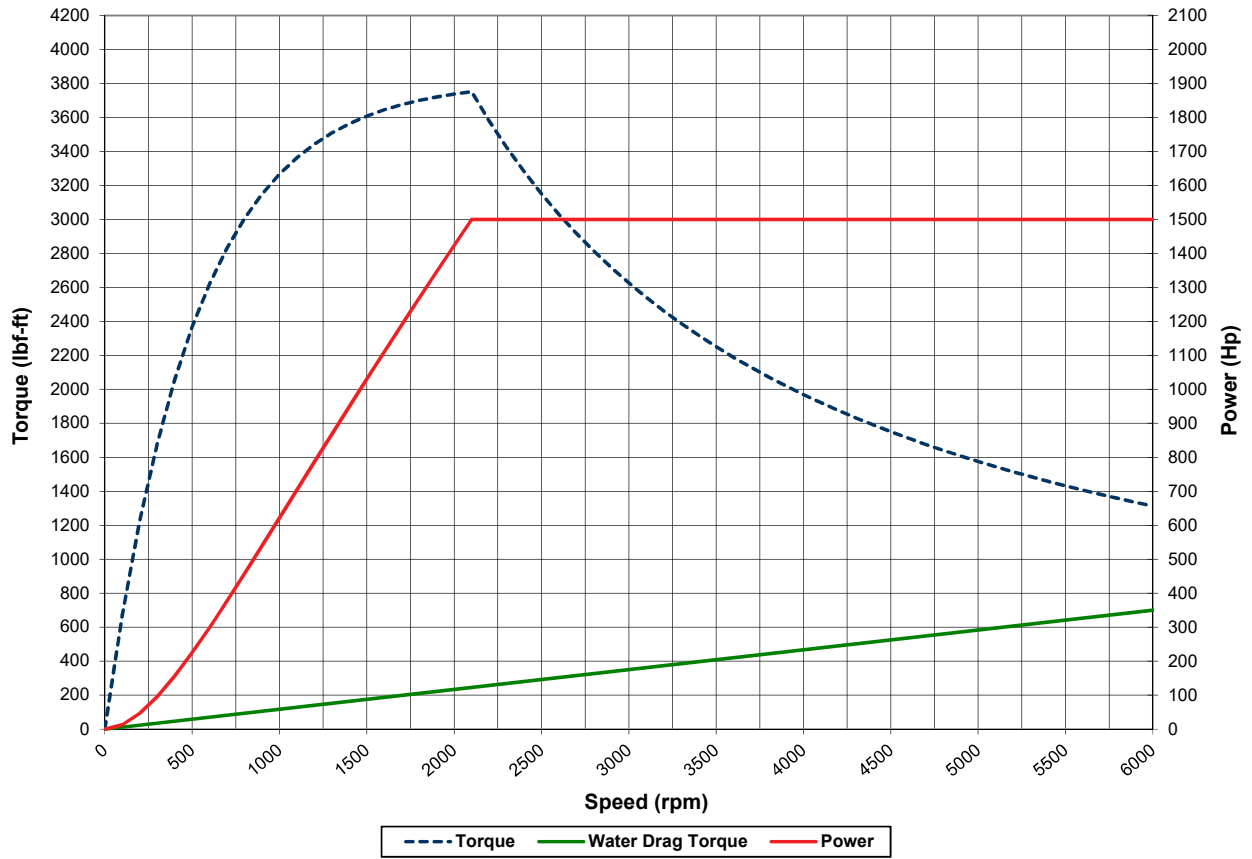


Design, Project & Construction Management Services

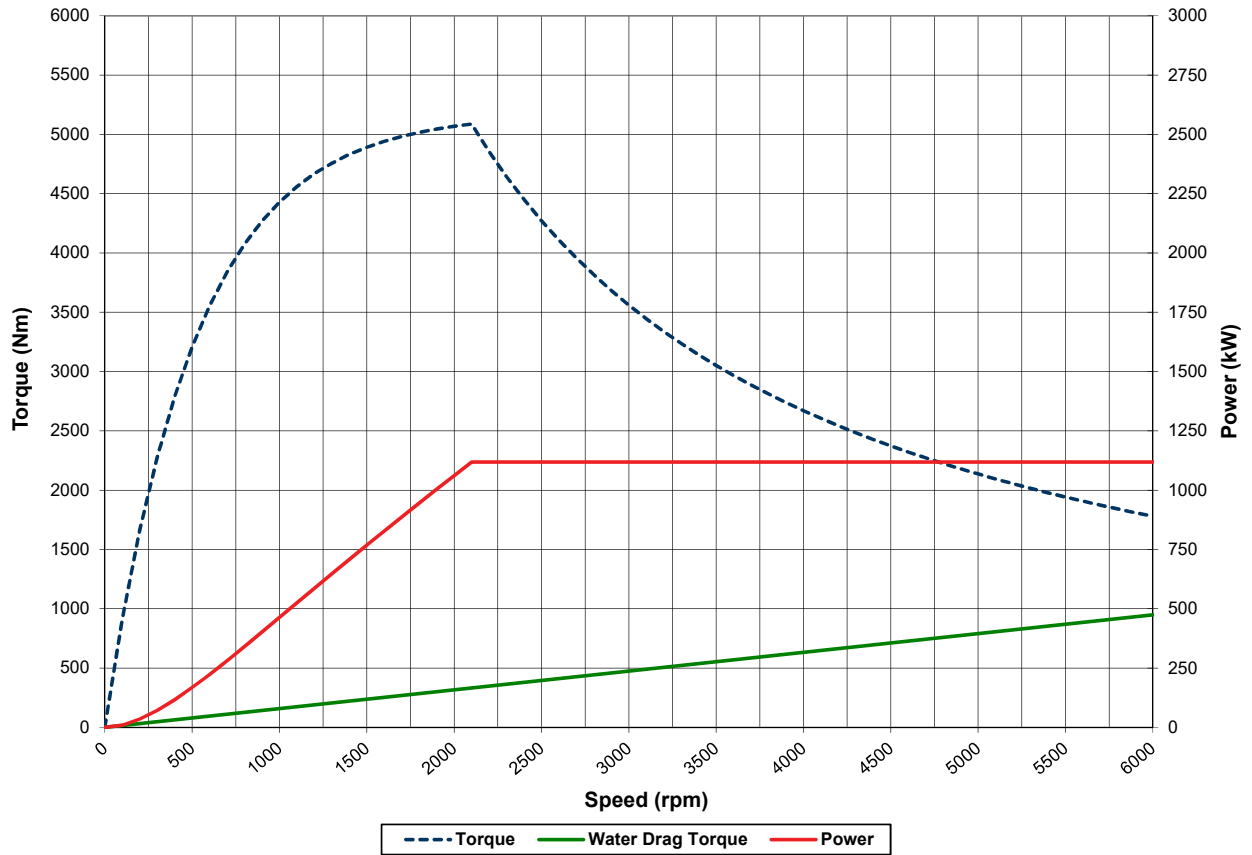


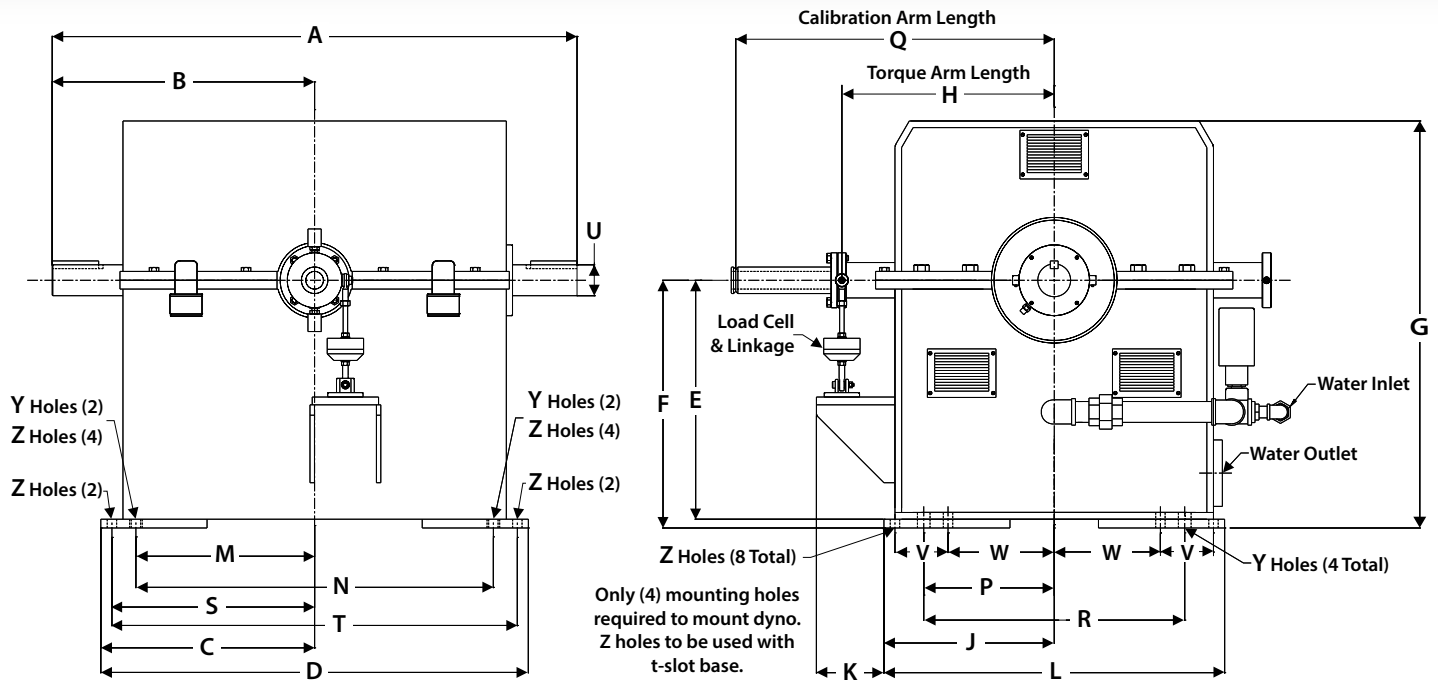
Commissioning, Start-up & Training

DM-8163HS (US Customary)



DM-8163HS (S.I.)





Note: Shown without companion flange

| Units               | A     | B     | C    | D     | E     | F   | G     | H   | J     | K   | L    | M    |
|---------------------|-------|-------|------|-------|-------|-----|-------|-----|-------|-----|------|------|
| <b>US Customary</b> | 59.3  | 29.66 | 22.2 | 48.3  | 26.25 | 28  | 46    | 24  | 19.25 | 7.6 | 38.5 | 20.2 |
| <b>S.I.</b>         | 1,506 | 753   | 564  | 1,227 | 667   | 711 | 1,168 | 610 | 489   | 193 | 978  | 513  |

| Units               | N     | P     | Q   | R    | S    | T     | U   | V   | W   | Y    | Z    |
|---------------------|-------|-------|-----|------|------|-------|-----|-----|-----|------|------|
| <b>US Customary</b> | 40.4  | 14.75 | 36  | 29.5 | 22.9 | 45.8  | 3.5 | 6   | 12  | 1.44 | 1.12 |
| <b>S.I.</b>         | 1,026 | 375   | 914 | 749  | 582  | 1,163 | 89  | 152 | 305 | 37   | 28   |

(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 1810 - US Customary
- Shaft End Guard
- Magnetic Pickup and 60-tooth Gear
- Pressurized Re-Circulating Oil System
- Bearing RTDs

*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  
 W209 N17391 Industrial Dr., Jackson, WI 53037  
 (800) 657-0726 [www.dynesystems.com](http://www.dynesystems.com)

DS2401v003