

Testing Services

Revolutionary Engineering (RE) is a leader in driveline component testing and driveline system testing and serves as an integral partner in the design validation and improvement process. Our test center is equipped with AC dynamometers that incorporate the latest inverter and control technology, enabling us to conduct simple to complex dynamic and steady-state tests. Our test engineers regularly design standard and custom tests that adhere to the highest quality testing standards and documentation protocol. RE is steadfast in our commitment to design solutions that meet our clients' testing needs—today and in the future.

Test types

- Durability
- Torque converter
- Road load, pulsation, and inertia simulations
- Axle
- Differential
- Gearbox
- Seizure
- Efficiency
- Transient response
- Key life
- Thermal
- Model verification
- Limited slip
- Open and locked differential
- Fluid couplings

Capabilities at a glance

Power range: 20 HP to 1,100 HP
Speed range: 0 to 17,000 RPM
Torque ranges: 0 to 15,000 lb.ft.

Up to 25,000 lb.ft. TOT (for axles)

Full Torque at zero RPM

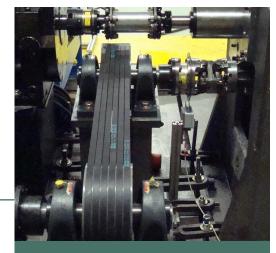
DC voltage range: 20 to 700 VDC

DC current: 800 Amps Continuous

1,600 Peak Amps

Environmental chamber

temperature range: -40C to 180C



RE was instrumental in assisting TESLA Motors with the development of their electric vehicle transmission by performing a series of tests, including WOT and road load profiles up to 14,000 RPM.

Additional capabilities

- Custom control modes
- High-speed logging
- Post-mortem logging
- High-response torque meters
- Power analyzers
- Multiple communication protocols
- Advanced hydraulic systems
- Customized software drivers
- Onsite engineering
- Onsite programmers
- Onsite machine shop/fabricator