



Hybrid Drivetrain Test Rig

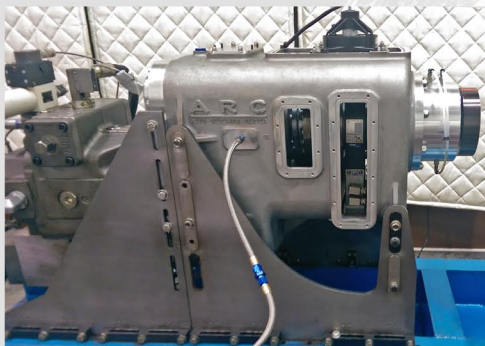
ARC, the Best Kept Secret in Efficiency!

Driveline failures, whether mechanical or hydraulic, happen frequently towards the start and finish of a vehicle's service life. By **testing your drive train components** on an ARC Drive Train Test Rig before production, errors and hence development costs can be reduced.

On the ARC Drive Train Test Rig, the performance of a gearbox, rear-end and driveline can be independently and **accurately measured** and optimized. The ARC Rig also allows for hybrid drive units to be tested. Our customers are therefore able to ensure the correct balance of performance and durability, while selecting the most suitable materials, design, and component configuration.

Fatigue life can be established with confidence under new operating conditions such as cooling airflow availability, improving total-life reliability.

The ARC Vehicle Dynamics Rig is located in Indianapolis, IN and is **available to rent** on a daily basis.



Drivetrain Test Rig Specifications

Input Power > 600 HP
 Max Input Speed > 9,000 RPM
 Output Simulated Road Speed ~ 190 MPH
 Max Gearbox Inclination = 60° (~1.75g)
 Maximum rig tilt angle = 10°
 Horsepower accuracy = 0.1% (calculated)
 Torque accuracy = 0.01%
 RPM accuracy = 0.05%
 Gearbox Installation Time ~ 15 minutes

Data Acquisition System

Speeds: Input, Output (Gearbox, LH & RH)
 Torque: Input, Output (Gearbox, LH & RH)
 Gearbox Oil Pressures
 Gearbox Temperature

Control Commands from PC:

Input Speed
 Gearbox Oil Temperature