

# CUSTOM ENGINEERED SOLUTIONS

In addition to Power Test's wide variety of standard equipment, many non-standard powertrain test requirements demand sophisticated engineered solutions.

This is why Power Test formed its Custom Engineered Solutions division. This team utilizes Power Test's industry-leading engineering expertise to create a solution to fit any unique application. The Engineered Solutions team studies all aspects of the test requirement to determine the optimized test solution. The concept is taken by the team of mechanical and electrical engineers to create a new machine design. CAD designers develop solid models of the new test stand for customer review and approval prior to release to our manufacturing operations group, where the testing solution is custom-built.

## Our Experience

- Research & development testing
- Durability & non-destructive testing
- Production & audit testing

### Drivetrain & Powertrain Applications

- Gearboxes
- Transmissions
- Driveshaft or couplings
- Compressors
- Unique multi-axle vehicles
- Electric motors
- Hydraulic pumps & motors

### Solutions

- Regenerative AC dynamometers
- Hybrid tandem dynamometers
- Cold (no-load) spin test stands
- Hydraulic test stands
- Custom chassis dynamometers

## Our Process

### Assessment of customer needs

- Test specimen review & test methods
- Data required from test stand
- Constraints, limitations & budgeting

### Project kick-off

### Conceptual design & design reviews

### Engineering design & solid model design reviews

### Machine fabrication

### Factory acceptance testing

### On-Site Installation Support

### Commissioning, training, & signoff

### Ongoing product support

No matter the application, we can create a custom solution.

**We measure our success by yours, one test cell at a time.**

## RECENT PROJECT EXAMPLES



### TD-5000

5000HP Regenerative  
Transmission Test Stand



### HTS-100x2

Dual 100HP, Regenerative Hydraulic  
Pump/Motor Test Stand



### TD-2000

2000HP Regenerative Torque  
Converter Test Stand



### AC-670

500kW Line-Regenerative  
Engine Dynamometer



### PPTS-M

Military PowerPack Test Stand  
for Armored Personnel Carriers



### HTS-200

200HP Hydraulic Pump/Motor  
Production Test Stand



### SS-CD

Automated End-of-Line Production  
Skid Steer Chassis Dyno



### CTS-60

Single Stage Screw Compressor  
Production Test Stand



### AC-300HS

High Speed Double Ended AC  
Regenerative Dyno



### AC-200LT

200HP Regenerative Engine  
Dyno on Lift Table

# Challenge Us!

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