

# **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.

## Custom Engineered Solutions



# **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



AC-300HS



AC-200LT

200HP Regenerative Engine Dyno on Lift Table

Single Stage Screw Compressor Hig Production Test Stand A

High Speed Double Ended AC Regenerative Dyno



www.powertestdyno.com

+ 1 262 252 4301