



# DETROIT TESTING LABORATORY, INC.



## Mechanical & Fatigue Testing

Repeated use of a product is a clear way to test its durability and wear characteristics. DTL has a broad capability for lifetime durability cycling of automotive, military and aerospace components such as cup holders, glove boxes, doors, suspension systems, large plastic and metal components and structures.

Detroit Testing Laboratory routinely performs repetitive cycling tests in our multiple mechanical testing laboratories. These tests can also be done in combination with environmental and vibration tests. We conduct full design validation (DV) and product validation (PV) test programs and our extensive in-house machine shop enables our engineering staff to design and construct custom test stands and fixtures.

### Testing Capabilities

- Combined Durability
- Environmental Testing
- Component Evaluation
- Experimental Stress Analysis
- Flammability
- Flow Measurement
- Servo-Hydraulic Fatigue Analysis
- Strain Gage Installation/Measurements
- Simultaneous Load vs. Deflection Measurements
- Mechanical Durability
- Pressure Cycling
- Environmental Fatigue
- Vehicle Seat Testing
- Life Cycle Endurance
- Structural Testing

### Routinely Tested Components & Systems

- Automotive Doors
- Automotive Seating
- Climate Control Systems
- Door Locks
- Engine Components
- Wiper Motors
- Transmission & Power Steering Lines
- Automotive Interior Products (glove boxes, cup holders, etc.)
- Aircraft Hydraulic Systems
- Military Power Systems
- Aircraft Fuel Systems
- Radiators
- Safety Restraint Systems
- Seats
- Shifters
- Shocks
- Mechanical Sensors

### For further information contact:

**Dominic Petitta**  
Account Manager  
Direct Dial: (586) 757-7569  
Cell Phone: (313) 850-9274  
E-mail: [dpetitta@dtl-inc.com](mailto:dpetitta@dtl-inc.com)

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27485 George Merrelli Drive  
Warren, MI 48092