

Delphi Customer Technology Center Michigan Vibration Laboratory

The Vibration Laboratory at the Delphi Customer Technology Center Michigan (CTCM) offers customers efficient and reliable dynamic evaluations and durability studies for a wide variety of products. The Lab has conducted studies for automotive and consumer product manufacturers in:

- Resonance searches
- Frequency response testing
- Sine testing
- Random vibration testing
- Sine on random testing
- Shock testing
- Mechanical impact testing
- Laser vibrometry
- Dynamic strain analysis



Environmental Chamber/Shaker Table in the Vibration Laboratory at Delphi's Customer Technology Center Michigan

The CTCM Vibration Laboratory has three electrodynamic shaker systems; one unit is coupled with a climatic chamber. All shakers feature a unibase system, which offers quick change from vertical to horizontal testing. Cycling or monitoring equipment can be located nearby for data acquisition during vibration.

Testing is conducted by a highly trained and experienced staff that understands the challenges facing manufacturers today. Laboratory services are conducted to meet individual customer schedules and at a competitive cost. Professional, experienced account management provides customers with single-point contact to streamline coordination.

Delphi's CTCM Vibration Laboratory supports customers who do not have in-house testing capabilities, or require "overflow" testing services.

► Capabilities

Delphi's CTCM Vibration Laboratory includes three electrodynamic shaker systems with the following features:

- Frequency range from 5 Hz to 3,000 Hz
- Maximum force to 12,000 pounds (5,500 kilograms)
- Maximum displacement of 1 inch (24 millimeters)
- Temperature range from -40°C to 170°C
- Humidity range from 5% to 95% relative humidity

▶ The Delphi Advantage

The Delphi Customer Technology Center Michigan supports hundreds of customers worldwide in the design, development, testing, and validation of their products. It is certified to the ISO/TS 16949 Standard for Automotive Supplier Quality Management Systems. It is part of Delphi's network of state-of-the-art technical centers around the world.

Delphi is a leading global supplier of a broad range of technologies with manufacturing facilities located in more than 30 countries. Delphi's products are engineered to meet the rigorous standards of the automotive industry, but Delphi technologies are also used on many other industries. We leverage a rich heritage and extensive technical knowledge to offer customers an array of innovative, cost competitive solutions.

▶ Contact Information

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