



Accurate and Affordable Bushing Durability Testing

System Features

- » True dynamic control
- » Up to 5 degrees of freedom:
 - Dynamic torsional and radial inputs, and static offset about the bushing axis
 - Additional static and dynamic inputs available
- » Extremely compact footprint
- » Expandable FlexTest™ GT control system
- » Optional torsional characterization
- » Optional time history playback capability

The versatile MTS Multi-Axial Bushing Durability TestStand simulates the real world service conditions of automotive bushings, and other critical vehicle suspension components, more accurately and cost-effectively than any other testing solution available. Featuring true dynamic control and up to five degrees of freedom, this highly efficient durability test system monitors component properties such as stiffness and damping throughout a testing cycle, allowing you to determine precisely when a component reaches its functional failure point – no more wasteful testing until a component fails completely.

This versatile multi-axial teststand can be configured to perform a wide variety of extended durability tests to qualify the service life of bushings and other critical vehicle suspension components. A typical system configuration includes dynamic axle torsion and radial inputs combined with a static displacement along the axle axis. A dynamic input of a conical, or cardonic, rotation about the radial axis, or a static conical input about the axis normal to radial can be added to increase the system's testing utility. The system's testing mechanism is tightly integrated to effectively minimize reaction path lengths, and its extremely compact footprint requires far less lab space than test systems of comparable functionality.

be certain.

In addition to multi-axis durability testing, this flexible teststand can be equipped with optional hardware to perform precision, single-axis torsional characterization of vehicle suspension components. Time history playback is also supported by employing world-renowned MTS RPC® (Remote Parameter Control™) software technology.

The system's powerful FlexTest™ GT control system enables direct, digital control of all dynamic system functions. Featuring multichannel and multistation capability, this flexible controller can be expanded to accommodate up to 4 bushing durability test stations and distribute test management and control to one or more personal computers.

Specifications

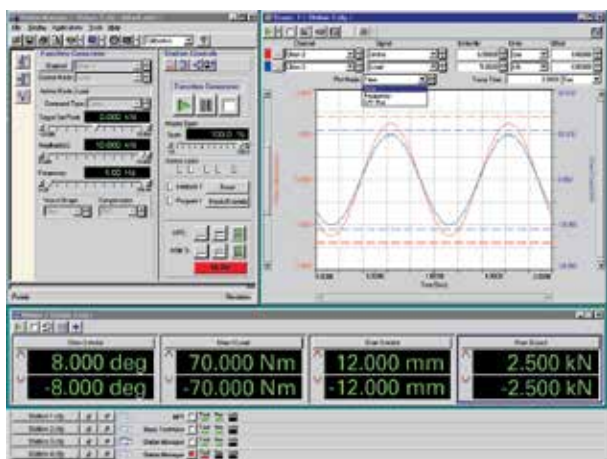
Radial Force	± 50 kN
Radial Displacement	± 25 mm
Axle Torque	± 550 N-m
Axle Rotation	± 45°
Axial pre-displacement	± 10 mm



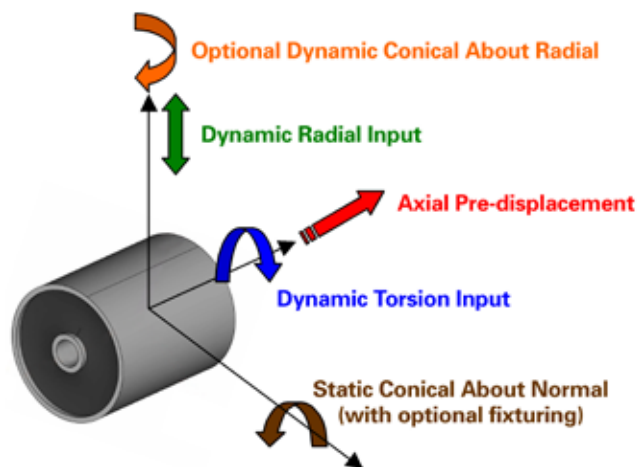
Multi-Axis Configuration:
conical about normal axis-static
input with optional fixture



Single-Axis Configuration:
torsional characterization



A powerful control system enables direct, digital control of all dynamic system functions.



Possible Component Inputs



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For More Information

Contact your local MTS sales engineer or
call MTS at 1-800-328-2255 or
1-952-937-4000.

Specifications subject to change without notice.

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