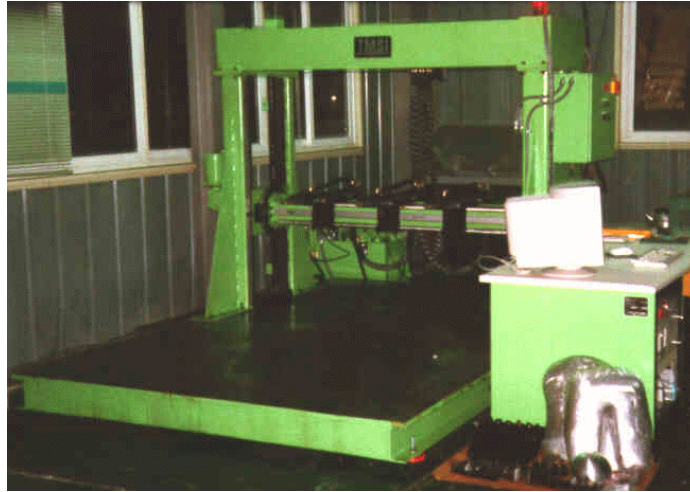


## *Multi-function Seat Test System*



### ***Purpose:***

Seat performance and durability has become increasingly important to automobile manufactures as crash test requirements have been increased for the protection of the consumer. The Multi-Function Seat Test System allows single cycle, continuous duty, and deflection testing to be performed on a number of test specimens. This test station is ideally suited for product qualification, reliability, stress, and fracture tests.

### ***Description:***

The equipment consists of a seat mounting test bed plate, A-frame loading stand with moveable crosshead, and three electrohydraulic actuator loading frames to apply the prescribed loads. This system has been designed primarily for single cycle, continuous duty, deflection, and fatigue testing. Tests are controlled by a **TMSI** Industrial PC Control System (MicroTeStation), which is interlocked with the electric controls of both the Hydraulic Power Unit and all three actuators for full test automation and data reduction/presentation/archival. Computer, printer, and control electronics are housed in a vertical rack enclosure especially prepared for electronic instrumentation.

### ***Control System:***

All electronic control and data acquisition systems provided by **TMSI** are integrated completely for control by a single PC with Windows® based software for intuitive operation with minimal operator training.

**TMSI MicroTeStation™** housed in 20.5 W x 72 H x 24 D inch instrument rack enclosure. Includes:

- Intel PentiumIII® Based Microprocessor Industrial Computer
- Standard Hard Disk Drive
- Single 3.5 in. Floppy Disk Drive
- Removable Zip or Jazz Disk for Data Archival and Storage
- Random Access Memory
- SVGA Color Monitor
- Windows® NT Operating System

### ***TMSI***

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*Test Measurement Systems, Inc.* • 150 Springside Drive • Suite A100 • Akron, Ohio 44333  
Sales: (888) TMSI-USA • Tel: (330)668-2010 • Fax: (330) 668-2365

<http://www.tmsi-usa.com>

- 16+ Chnl A/D, DIO On-board data acquisition/reduction system
- 6+ Chnl Anti Alias Filters
- Telephone Modem
- Color Printer

***Data Acquisition/Control:***

Parallel full-time data acquisition/control processing is accomplished by MicroStar Data Acquisition Processors (DAP) which feature on-board CPU and memory as well as 16 bit Analog to Digital and Digital to Analog converters. Closed-loop PID control is achieved on-board the DAP unit for full software tunability of hydraulic actuators in both load and position feedback control.

- MicroStar DAP Data Acquisition Processor to operate in parallel with the PentiumIII Microprocessor
- ComputerBoards CIO/DIO 24 SSR, Solid State Relays for sensing and controlling digital inputs and outputs

***Software:***

**SeatTEST™** is **TMSI's** data acquisition/reduction program to operate the on-site MicroTeStation in Windows NT presentation, control tests according to User-required Force and Cycle test procedures, reduce and present tabular and graphical reports, and archive tests results to hard or floppy disk.

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