Tensor 900

Multi-Axis High Frequency Vibration Test System

Team Corporation´s addition to the TENSOR™ Family of Multi-Axis Test Systems Provides Unmatched Performance in High-Frequency, Simultaneous Excitation

Tensor 900 is a fully contained multi-axis vibration test system capable of precise control of all six degrees of freedom through a 5 kHz bandwidth. The system can reproduce real world vibration environments by simultaneously exciting all three linear translations as well as all three rotations, to a frequency level never before achieved. This unprecedented performance has been made possible through the use of Team Corporation's expertise in hydrostatic bearing design and multi-axis system engineering.

U.S Patent: 6 860 152
China Patent: ZL 03 809 374.X
Japan Patent: 4 217 210

Features:

- Simultaneous or sequential excitation of X, Y, and/or Z axes
- Accurate replication of true, real-world vibration environments in all 6DoF
- Force Rating of 200 lbf (890 N) Sine and 65 lbf (290 N) in Random
- Complete control of rotations around all axes
- Bandwidth from 10 Hz through 5 kHz
- 20 Grms acceleration on nominal payload
- Fully contained system (electrical power only requirement)

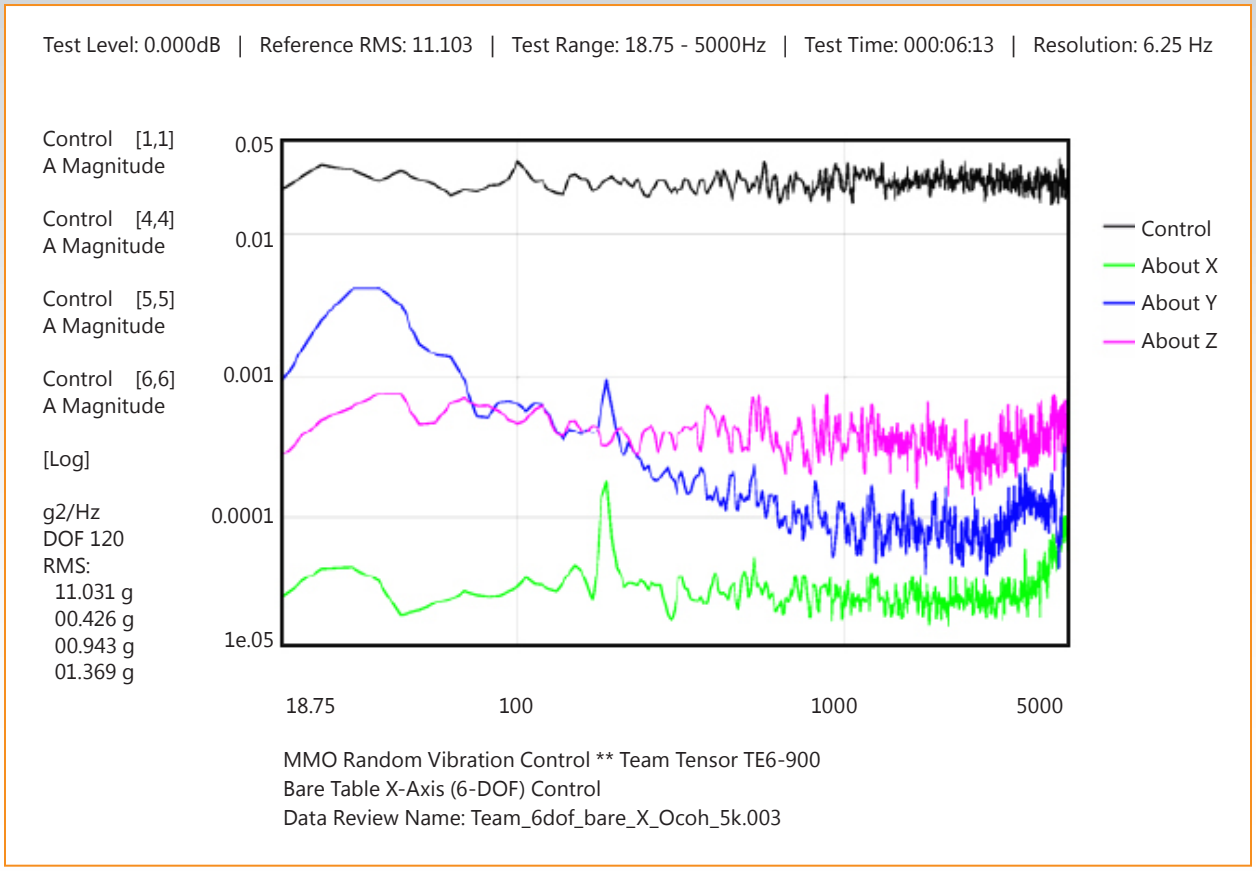
Applications:

- Avionics Testing
- Accelerated Durability, Life Cycle and Fatigue cycling
- Precise product development investigation
- Rapid screening of electrical components and modules
- Addresses new multi-axis testing protocol in MIL STD 810(G)

Specifications

Dimensions:	English	Metric
Top Surface	7.8 in x 7.8 in	0.2 m x 0.2 m
Bare Table Moving Mass	9 lbs	4.1 kg
Table First Frequency	5,000 Hz	5,000 Hz
Operational Frequency Range:		
Test Frequency Range	10-5,000 Hz	10-5,000 Hz
Max Frequency-Peak Force	10-5,000 Hz	10-5,000 Hz
Max recommended Payload	9 lbs	4.1 kg
Translation Performance Vertical:		
Displacement - P-P Dynamic	0.5 in	12.7 mm
Velocity - Peak	41 ips	1.04 m/sec
*Acceleration (with max payload)	10 g	10 g
Force/Axis	200 lbf	890 N
Translation Prefomance Lateral:		
Displacement - P-P Dynamic	0.5 in	12.7 mm
Velocity - Peak	41 ips	1.04 m/sec
*Acceleration (with max payload)	10 g	10 g
Force/Axis	200 lbf	890 N
Longitudinal Displacement		
Displacement - P-P Dynamic	0.5 in	12.7 mm
Velocity - Peak	41 ips	1.04 m/sec
*Acceleration (with max payload)	10 g	10 g
Force/Axis	200 lbf	890 N
Rotational Performance:		
Roll Displacement	+/- 5.0 degrees	+/- 5.0 degrees
Pitch Displacement	+/- 5.0 degrees	+/- 5.0 degrees
Yaw Displacement	+/- 5.0 degrees	+/- 5.0 degrees
Thermal Protection:		
Standard	39 F to 149 F	4 C to 65 C
With Thermal Barriers	-104 F to 250 F	-40 C to 121 C

**Frequency & Acceleration dependant*



Translational MDOF motion control to 5000 Hz with exceptionally low cross axis rotational motion.

Features

- Direct Load Path
- Eliminates Backlash
- Eliminates Friction
- Offers Flexibility on Installation
- Low Maintenance, Long Life Product

Applications

- Printed Circuit Board
- Arionics
- Guidance Systems
- Computer Hard Drives

By coupling electrodynamic shakers to the moving element with hydrostatic bearings, TENSOR™ has the performance to produce true multi-axis excitation to frequency levels previously attainable only in a single axis. The TE6-900 uses dynamic control of all six degrees of freedom to precisely reproduce the desired response, from 10 through 5 kHz. This also minimizes the moving mass of the table, which results in a more efficient use of available shaker power.

The unique arrangement of shakers around and under the moving table facilitates dynamic control of mode shapes resulting in better control. This feature offers unparalleled control precision, taking advantage of the sophisticated algorithms that form the basis of contemporary test controller software.

Team Offices

- Authorized Sales Agents

sales@teamcorporation.com

Corporate Headquarters
11591 Watertank Road,
Burlington, WA 98233, USA
+1.360.757.8601
teamcorporation.com

EMEA
South Road, Hailsham
East Sussex, BN27 3JJ, United Kingdom
+44.(0).1323.846464
Fax: +44.(0).1323.847550

Engineered vibration testing solutions for improved product quality