

Team Corporation's Tensor
18kN is the latest evolution in
high frequency, large platform
simultaneous multi-axis vibration
testing equipment. This unique
2kHz system provides the test
professional with complete
control and fidelity over all 6
degrees of freedom.

Team's expertise in mechanical design combined with high precision manufacturing capability results in an extremely robust vibration test system with unequaled accuracy. Truly an innovation in vibration test system evolution, the Tensor 18kN is recognized as the system of choice for replicating critical field environments.

Tensor 18kN™

Multi-Axis High Frequency Test System

Team Corporation's latest addition to the TENSOR™ Family of Multi-Axis Test Systems Provides Unmatched Performance in High-Frequency, Simultaneous Excitation. Twelve integrated electrodynamic shakers provide 4,800 lbf (21.3 N) in each axis.



Features:

- Simultaneous or sequential excitation of X, Y, and/or Z axis
- Peak sine force Rating of 4,800 lbf (21.4 kN).
- RMS Random force rating of 3600 lbf (16kN).
- Complete control of rotations around all axis
- Velocity of 50 ips (1.3m/sec)
- Displacement +/- 0.50 in (12.7 mm) dynamic
- Bandwidth from 5 Hz through 2 kHz
- Sine Acceleration 6.6g peak*

- RMS acceleration 5.0 grms*
- Angular rotation +/- 4°

Applications:

- Accurate replication of true, real-world vibration environments in all 6DoF
- 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)

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Specifications

Max required facility Current

Max Heat rejected to Air

Armature Power

Dimensions:	English	Metric
Top Surface	30 in x 30 in	0.76 m x 0.76 m
Bare Table Moving Mass	430 lbs	195 kg
Max recommended Payload	300 lbs	130 kg
Operational Frequency Range:		
Test Frequency Range	5-2,000 Hz	5-2,000 Hz
General Specs per Axis		
Displacement - P-P Dynamic	1.0 in	25 mm
Displacement - P-P Static	1.5 in	38.0 mm
Velocity - Peak	50 ips	1.3 m/sec
*RMS Acceleration (with max pay- load)	5 grms	5.0 grms
Force/Axis - RMS	3,600 lbf	16,000 N
Force/Axis - Sine	4,800 lbf	21,360 N
Rotational Performance:		
Roll Displacement	+/- 4.0 degrees	+/- 4.0 degrees
Pitch Displacement	+/- 4.0 degrees	+/- 4.0 degrees
Yaw Displacement	+/- 4.0 degrees	+/- 4.0 degrees
Hydraulic Power Supply Requirements:		
Facility Power	460 VAC / 60 Hz / 3-Ph	
Motor Power	50 hp	
Circuit Breaker Disconnect	125 A	COLL
Cooling Water	30 gpm @ 70°F MAX	2001
Suction Pump Requirements:		SIX-DOF VII
Facility Power	460 VAC / 60 Hz / 3-Ph	TIME-TO-FAIL
Motor Power	7.5 hp	1
Circuit Breaker Disconnect	30 A	I
Power Amplifier:		
Number of Electronic Racks	4	
Facility Power	460 VAC / 60 Hz / 3-Ph	and a
Max Power Output per Rack	37 kVA	
Circuit breaker disconnect per rack	65 A	



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260 A 80 A / 110 V / 10 kVA

10,000 BTU/hr



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Engineered vibration testing solutions for improved product quality



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