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 accurate replication of real-world vibration environments in all 6 DoF.

Features
- Twelve (12) integrated electrodynamic shakers
- Hydrostatic coupling (pad bearing) to table reduces moving weight and mechanical linkage for improved frequency response
- Pad bearing design also allows for an extremely stiff interface, further improving high frequency response
- Oil-cooled and oil-guided ED shaker design
- All moving parts are hydrostatically supported reducing wear and tear, decreasing downtime and improving test capacity
- Integrated air-isolated reaction mass for turnkey installation in a single package

Applications
- Accurate replication of real-world vibration environments in all 6 DoF
- Accelerated durability, life cycle and fatigue cycling
- Avionics validation
- Rapid screening of PCBs, electrical components and modules
- Addresses multi-axis testing protocol in MIL STD 810H
- Precise product development investigation

Dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>English</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Surface</td>
<td>30 in x 30 in</td>
<td>0.76 m x 0.76 m</td>
</tr>
<tr>
<td>Bare Table Moving Mass (per axis)</td>
<td>450 lbs</td>
<td>105 kg</td>
</tr>
<tr>
<td>Max recommended Payload</td>
<td>3901 lbs</td>
<td>170 kg</td>
</tr>
</tbody>
</table>

Operational Frequency Range

- Test Frequency Range: 5-2,000 Hz
- Operational Frequency Range: 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: 5 gms / 5.0 gms
- Force/Axis - RMS: 3,600 lbf / 16,000 N
- Force/Axis - Sine: 4,000 lbf / 21,360 N

Rotational Performance

- Roll Displacement: +/- 4.0 degrees
- Pitch Displacement: +/- 4.0 degrees
- Yaw Displacement: +/- 4.0 degrees

* Assumes the maximum recommended payload.

Tensor 18kN Facility Requirements

- Facility Power: 460 VAC / 60 Hz / 3-Ph
- Motor Power: 50 hp
- Circuit Breaker Disconnect: 125 A
- Cooling Water: 30 gpm @ 70°F MAX

Suction Pump Requirements

- Facility Power: 460 VAC / 60 Hz / 3-Ph
- Motor Power: 7.5 hp
- Circuit Breaker Disconnect: 30 A

Power Amplifier

- Number of Electronic Racks: 4
- Facility Power: 460 VAC / 60 Hz / 3-Ph
- Max Power Output per Rack: 37 kVA
- Circuit breaker disconnect per rack: 65 A
- Max required facility Current: 260 A
- Armature Power: 80 A / 110 V / 10 kVA
- Max Heat rejected to Air: 10,000 BTU/hr