BiSS 3-axes, 6-degrees-of-freedom shaking tables are state-of-the-art solutions for seismic simulation, soil liquefaction and vibration tests on building models as well as for engineering qualification of equipment or its components and assemblies for earthquake and vibration resistance. The table is designed to enable rigid mounting of specimens for transfer of required acceleration history. The center of gravity of the test object can be located anywhere within the working space of the table.

Table motion is generated through precision dynamic synchronous control of all 8-actuators: 4-vertical, 4-horizontal. The double ended, double acting, equal area servo actuators with swivel mounting on both ends isolate the piston rods from side loads.

The system is powered by an electronically servo controlled low noise, variable flow, variable pressure, energy efficient pump and a digital control and data acquisition system with options to connect a wide variety of transducers.

### Standard Features
- Simulator tables, 0.5 x 0.5 m, 1 x 1 m, 2.5 x 2.5 m and 3 x 3 m
- Threaded mounting holes on the table top for specimen
- Fatigue rated actuators
- Low friction and low maintenance swivels
- Displacements up to 500 mm
- Designed with a natural frequency to exceed 2-4 times maximum test frequency.
- Contamination insensitive hydraulics
- User friendly control and application software
- Fully digitally controlled with servo loop update 2-5kHz and DAQ rate of 0.5-2kHz.

### Applications
- Education in earthquake engineering, marine engineering
- Dynamic response prediction, functionality, strength and durability of the structural test object
- Vibration qualification tests on mechanical components in laboratory
- Seismic qualification tests on components of nuclear power plants.
- Soil liquefaction tests civil structures
Application Software:
I. Capable to simulate:
   a. Single Frequency Harmonic Signals:
      a) Sine, Ramp
      b) User-defined
   b. Multi-frequency Signals:
      a) Sine sweep
      b) Actuation Excitation Records,
      c) Simulated Excitation Records
   c. Random Signals:
      a) Ergodic,
      b) stationary and
      c) non-stationary random signals
II. Facilitates multi-step, multi-loop programming
III. Facilitates to preview each DOF, Step and loop
     Waveform
IV. Each preview and editing of the steps in a loop
V. Facilitates to generate drive signals for durability testing
VI. Online display of max-min, instantaneous,
     average,cycle count readouts
VII. Data export in *.csv and *.txt formats