



# TDG-SHAKETABLE BIAxIAL

## DESKTOP SERVO ELECTRO MECHANICAL SHAKE TABLE

TDG- SHAKETABLE BIAxIAL™ can simulate earthquakes using real records. It is also possible to operate it with waveforms such as sine and triangle. The system is fully controlled via computer software. EasyTest Shaketable software is offered along with the TDG- SHAKETABLE BIAxIAL™. The system can simultaneously operate both of its axes with the any given waveform or earthquake profile. It is commonly used in Civil, Structural and Earthquake Engineering. It can be used for soil and geological engineering tests and calibrating accelerometers and seismic instruments.

With its cutting edge technology and advantageous price, it attracts high level universities and research laboratories.

**"DEVELOPED 100% IN TDG LABORATORIES & PATENTED"**

## FEATURES

- Highest Control Resolution with Servo Motor
- Closed Loop PID Control
- Up to 100 kgf payload (@ ±1 g)
- 75X75 cm Upper Table
- Up to 5g (No-Load)
- ±100 mm Stroke in both of the axes.
- Operational Frequency up to 30 Hz
- High precision linear guideway with low friction.
- Earthquake Simulation (Arbitrary User-Defined Waveforms)
- Standard Waveforms - Sine, Triangle, Etc
- Easy Setup, Plug & Play
- 230 V AC / 50-60 Hz Mains Voltage
- High Industrial Quality, Virtually Maintenance Free

## FIELDS OF APPLICATION

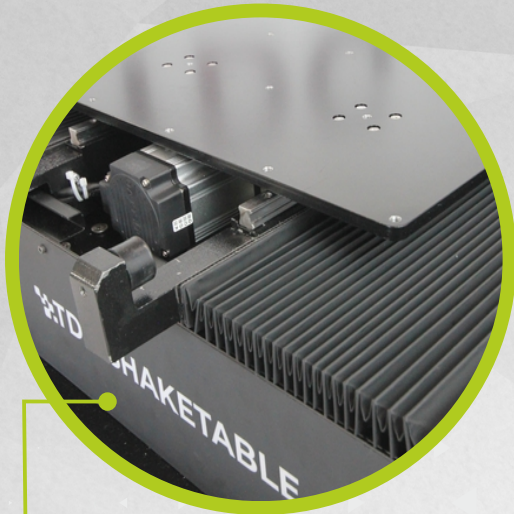
- LABORATORIES (Civil Engineering)
- EARTHQUAKE SIMULATION
- EDUCATION (Graduate & Undergraduate)
- MODE SHAPES (with Model)
- SMALL SCALE TESTS (Soil, Geophysics, Mechanics, Manufacturing)
- CALIBRATION (Accelerometers)
- CONTESTS / COMPETITIONS (EQ Resistant Design)

• COMPACT DESIGN



• INTEGRATED LIMIT SWITCH FOR INCREASED SAFETY

• AUTOMATIC CENTERING / HOME POSITIONING



SUPER LOW-FRICTION PRECISION LINEAR GUIDES

RUBBER TIPPED MECHANICAL STOPPER

MOUNTING HOLES GRID ON THE UPPER TABLE

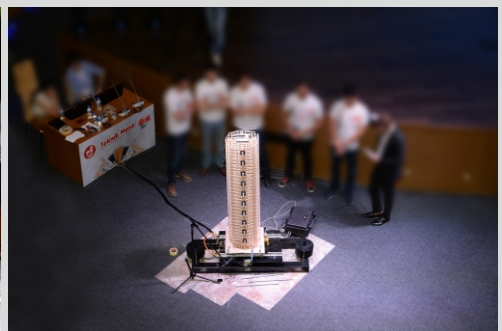
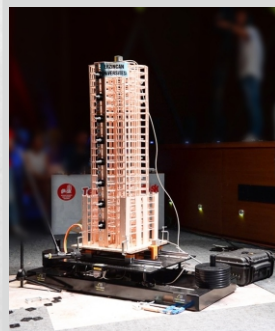
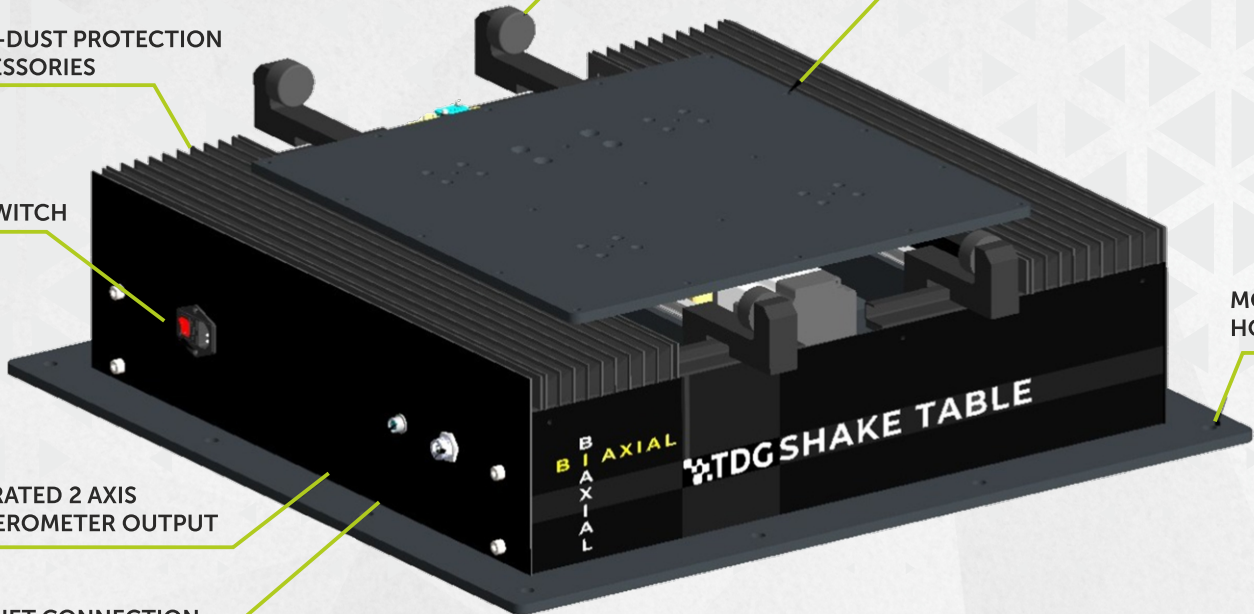
ANTI-DUST PROTECTION ACCESSORIES

POWER SWITCH

MOUNTING HOLES

INTEGRATED 2 AXIS ACCELEROMETER OUTPUT

ETHERNET CONNECTION

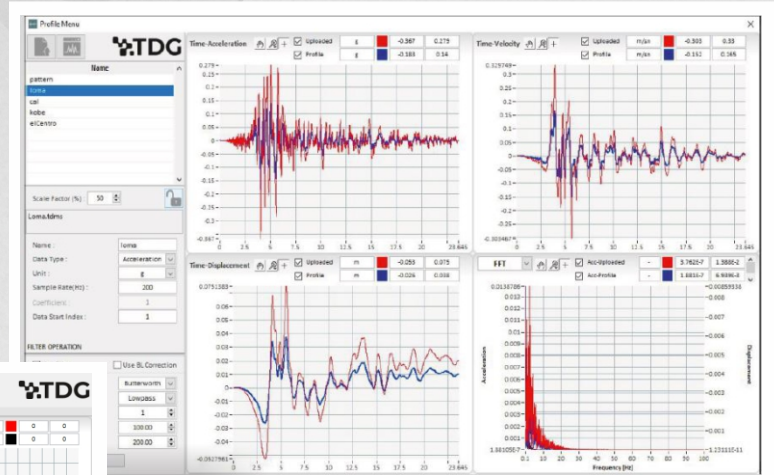


CHOICE OF DASK (NATURAL DISASTER INSURANCE INSTITUTE) SINCE 2014

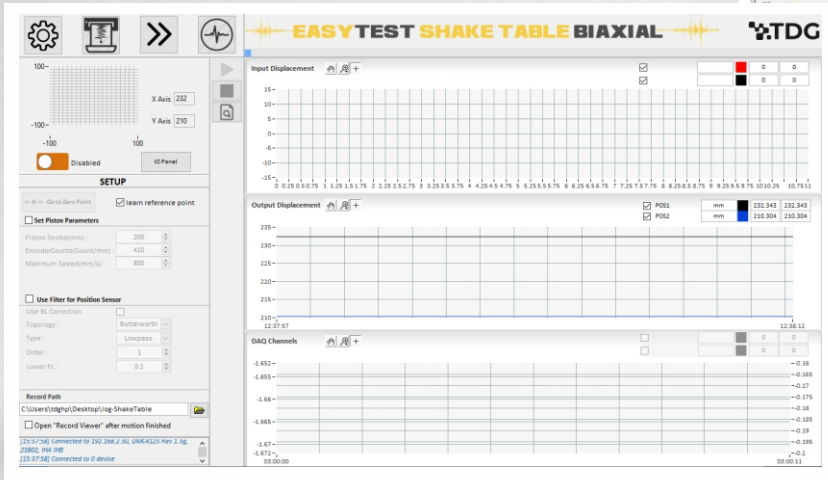
TDG-SHAKETABLE is used as the earthquake simulator, together with TESTBOX2010 digitizer, SENSEBOX7001 accelerometer in "Earthquake Resistant Building Design Competition" organized by DASK, since it was first arranged at year 2014.

# EASYTEST SHAKE TABLE BIAxIAL

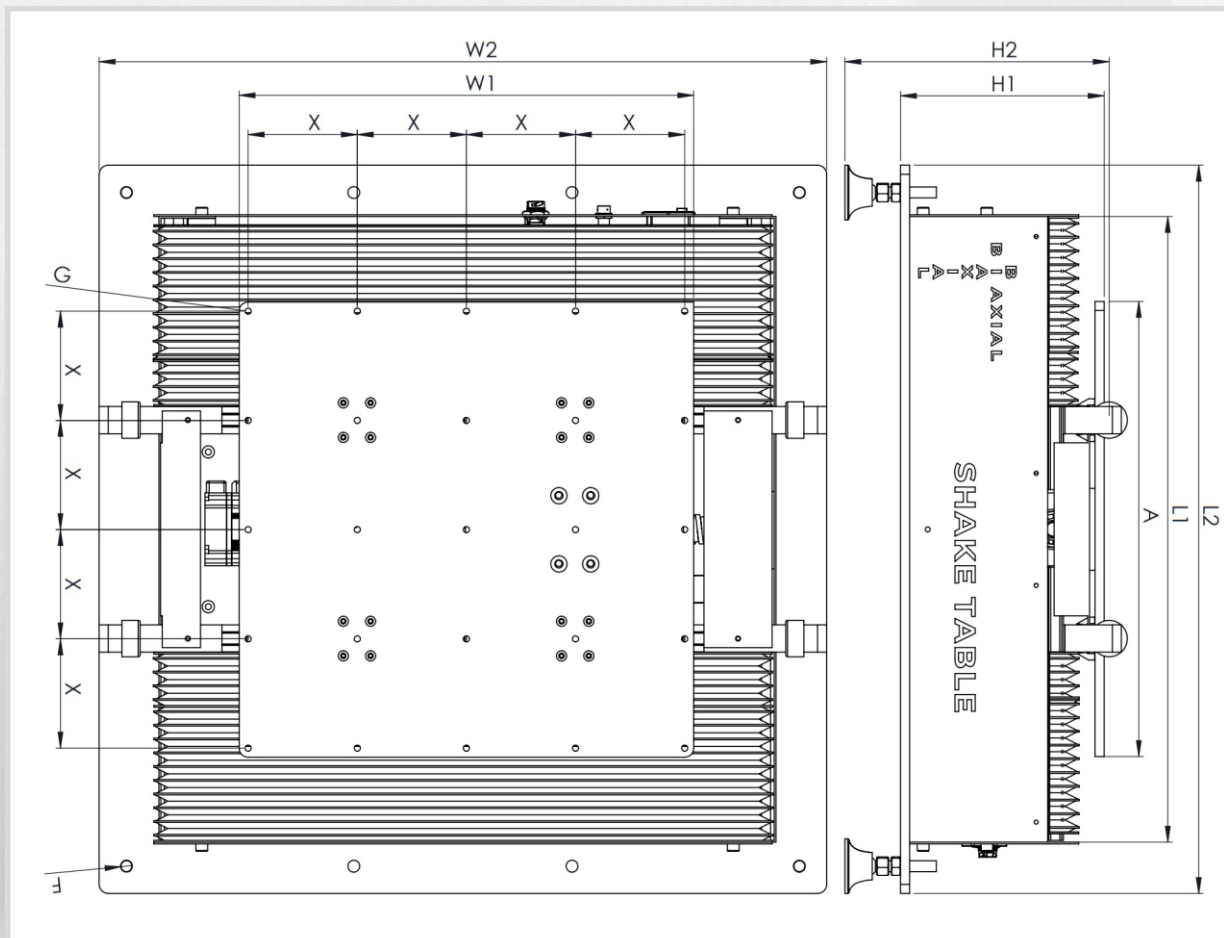
DAQ Support, Calibration, Filtering, Record  
 User-friendly Software  
 Uploading Real Earthquake Data  
 Automated Data-logging  
 Amplitude, Frequency Sweep, White Noise  
 Unlimited Profile Length, Continuous Operation



Real-time Monitoring & Detailed  
 Analysis  
 Sine & Triangle,  
 Sawtooth, Arbitrary Waveforms  
 Time Series, FFT, and Response  
 Spectra Graphs  
 Save/Load Profile and Motion  
 Parameters



## Design of TDG SHAKE TABLE BIAxIAL



# TDG-SHAKETABLE BIAXIAL

DESKTOP SERVO ELECTRO MECHANICAL SHAKE TABLE

## Technical Specifications

“DEVELOPED 100% IN TDG LABORATORIES & PATENTED”

### Test Capacity

Degree of Freedom	Double
Movement Direction	Horizontal
Table Dimension	750mmx750mm
Payload Capacity	100kg@1g(Each Axis)
Velocity	650 mm/s
Stroke	±100mm
Frequency	30 Hz
Position Precision	0.001 mm

### Physical&Environmental

Overall Dimensions	800mmx 800mm x 250mm
Weight	80 Kg
Operating Temperature	0-50°C

### Power&Electrical

Mains Connection	230 V AC / 50-60 Hz
Pc Connection	Ethernet
Power Consumption	4 kW Max.

### Certification

CE	Valid for all versions LVD (2014/35/EU) EMC(2014/30/EU) TDG Calibration Lab Factory Calibration Certificate
Caliibration	

### Software

EasyTest Shake Table BIAXIAL	Developed by TDG Included in the package
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Scan to see the action!



Teknik Destek Grubu Bilimsel Ölçme Ltd. Şti.

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