



Advanced Test Equipment Corp.
www.atecorp.com 800-404-ATEC (2832)



Specifications

TCB-1.3 All Axis Benchtop Vibration Table



FEATURES

Cabinet Items:

- Two (2) high temperature accelerometers, rated temperature range -73°C to +163°C (-100°F to +325°F). Provides a low pass filtered 10KHz feedback control input to controller.
- Stainless steel table base and beige powder-coated steel
- Removable control console & lid for optional placement inside an environmental chamber 16 cu. ft. (450L) and larger for combined temperature & vibration
- One (1) 2" (5cm) circular access port
- Sound deadening materials for noise reduction
- Standard air connection hoses and two additional 10' hoses for use with environmental chamber

Instrument Items:

- EZT-570S 4" Touch Screen Controller with Ethernet & RS-485 Computer Interface
- High vibration limit
- Audible & visual alarms
- Supply & controlled air pressure gauges

DIMENSIONAL DATA

Overall Exterior Dimensions

(approximate)

33"W x 31"D x 23"H (838mm x 787mm x 584mm)

Table Base: 22"W x 23"D x 12"H (56cm x 58cm x 30cm)

Vibration Table

16" wide x 16" deep (406mm x 406mm), 3/8"-16 UNC on 2" centers, metric optional
Maximum Table Load Capacity: 200 lbs. (90kg). Note: Maximum vibration levels are reduced as weight is added to the table. Table not suited for testing heavy, high density, concentrated loads.

Shipping Dimensions

(approximate)

Domestic: 42" W x 42" D x 31" H (1067mm x 1067mm x 787mm)

International: 43" W x 43" D x 34" H (1092mm x 1092mm x 864mm)

Shipping Weight

(Approximate. Certain options can increase these values)

200 lbs (90 kg). Base Only: 120 lbs (54 kg)

PERFORMANCE DATA – TEMPERATURE

Temperature Range:

Base Only: -70°C to +163°C (for use inside environmental chamber 16 cu. ft. or larger); prolonged soaks outside -40°C to +90°C may permanently degrade performance of the table. Silicone diaphragm must always be in place when using this unit inside an environmental chamber.

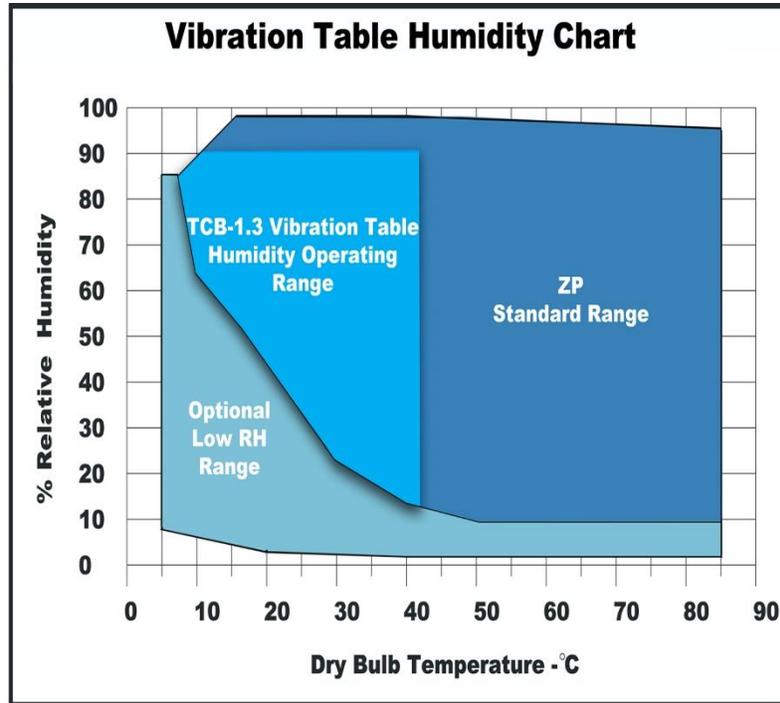
Vibration System:

1 - 60 GRMS, 3 Hz - 10 kHz; unloaded table with standard vibration system. Random, All-Axis Broadband - three translations, three rotations, 6 DOF. The vibration system consists of a specially designed and machined aluminum structure that utilizes four (4) pneumatically actuated vibration generators that are mechanically mounted to the underside of the table structure. The table design provides unsurpassed x, y and z GRMS balance. This feature greatly enhances the capability to detect precipitated defects. Dynamic range vibration system design can start and running at very low GRMS levels without any mass loading of the system. High GRMS vibration is necessary for precipitation; low GRMS vibration is essential for complete detection of intermittent failures.

PERFORMANCE DATA – HUMIDITY

Humidity Range:

The operating range for the vibration table when placed in a chamber is limited to a +40°C and lower dew point – please see humidity chart



FACILITIES & UTILITIES DATA

Compressed Air:

< 20 SCFM maximum @ 100 psi with standard vibrators, 3/8" FNPT

Operational Sound Level (Front):

80 dB at 60 GRMS, 75 dB at 30 GRMS

Electrical Information:
(±5%)

115 volt, 1 phase, 60 Hz, < 2 Amps

220 volt, 1 phase, 50 Hz

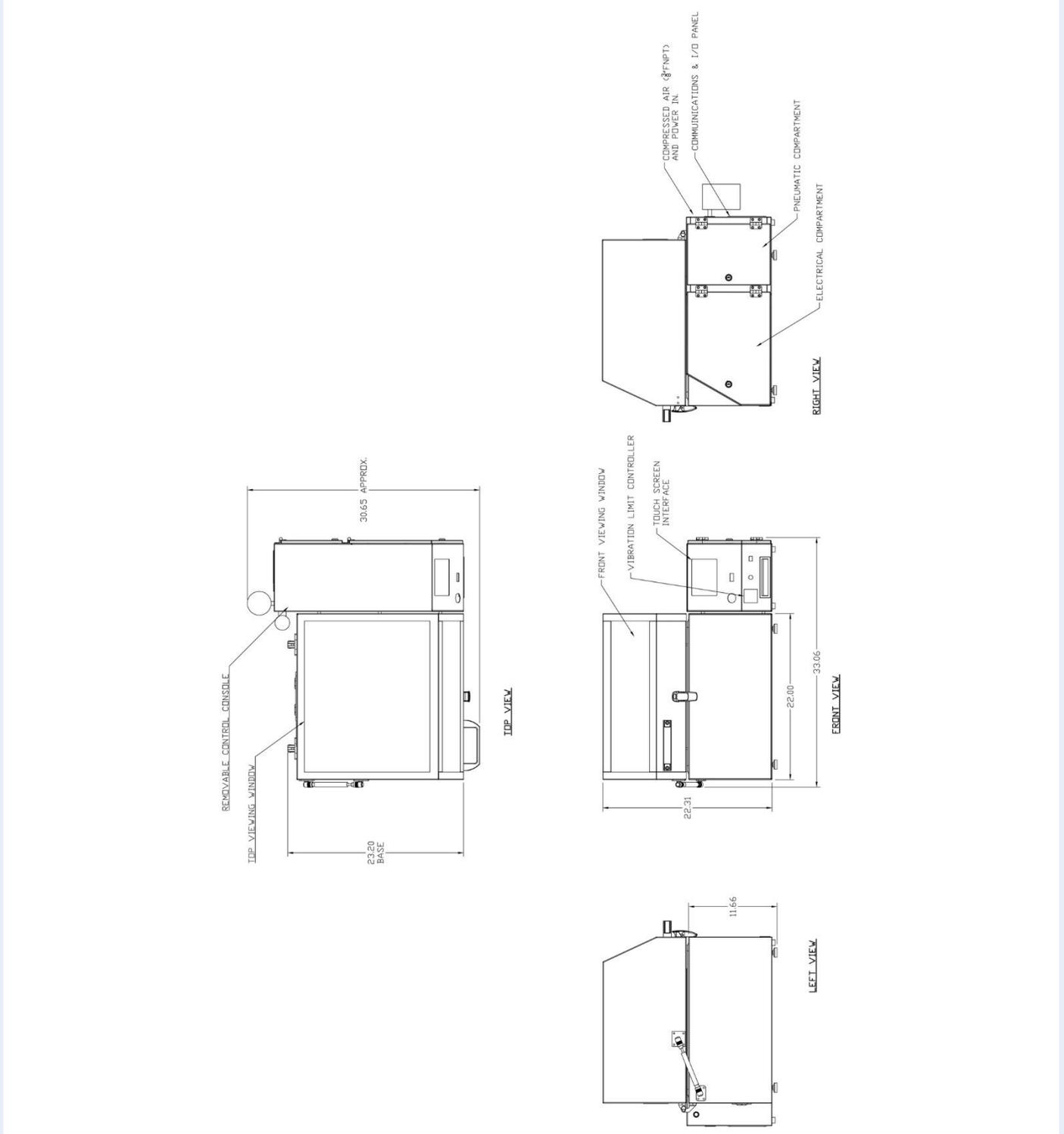
Customer to provide power cord and plug

***Refer to option list other available standard input voltages*

Notes:

- All values are approximate (if provided)
- Please contact factory for final values when determining your required utilities or refer to chamber's layout/approval drawing
- 50 hertz also available, contact factory for details

GENERAL ARRANGEMENT



CONTROLLER



**The Next Generation Controller
with Smartphone Technology**

Includes trend graphing, data logging, data file access with USB, Ethernet control and monitoring, email alarm notifications and/or text message, data file backup system, full system security, audit trail, digital signatures, power recovery options & more.

Touch Panel	4" (102mm) Ergonomic height, 21 CFR Part 11 Compliant.
Program Controller	Start parameters for programs: start, stop, pause, delayed autostart, Program ramp steps entering time or °C/min, 99 steps, 1,000 cycles maximum. Profile status view.
PID controller	Special control algorithms, define/change per output demands.
Data-Logging	Custom file names, batch/lot numbers, operator notes & digital signatures.
File Management/Email	Easily download profiles, alarm files, audit trail files and data files to USB stick. Also import profiles for easy transfer among multiple chambers. Email data, alarm history & audit trail files directly from the controller with a touch of a button.
Switch Inputs (Digital)	(Optional) 8 inputs for configuring controller functions.
Switch Outputs (Digital)	(Optional) 15 event outputs with connection panel & plug connectors.
Product Control	Accelerates temperature cycling of the device under test.
Password Protection	3 levels of security.
Diagnostic System	Fully configurable alarm settings and maintenance alerts.
Communication	Control by Ethernet TCP/IP, EIA-232/485 Modbus communication.
Ethernet Interface	Remotely monitor and control with VNC Server.
Multi-Language Display	Configurable for 27 different languages.

VOLTAGE OPTIONS AVAILABLE MUST SELECT OPTION FOR YOUR ORDER

<input type="checkbox"/> 115 volt, 1 phase, 60 Hz, < 2 Amps	<input type="checkbox"/> 220 volt, 1 phase, 50 Hz
<input type="checkbox"/> Customer to provide power cord and plug. Note: Value is approximate. Note: Final values will be furnished after order.	

CHAMBER OPTIONS

<input type="checkbox"/>		<p>Spectrum analyzer, 4-channel, with VibTrak Software, EIA-485 to USB Converter & Cable (no accelerometers). Option provides monitoring of the vibration levels and spectrum for the product under test. Also shows power spectrum vs. frequency profile. Includes signal input module along with cabling to connect to customer supplied computer. VibTrak software provides full profile control, datalogging, data file and profile export, real time trend graphs, and PSD (spectrum analysis) curves.</p> <p>Note: Must order number of accelerometers needed separately.</p>
<input type="checkbox"/>		<p>Spectrum analyzer, 8-channel, with VibTrak Software, EIA-485 to USB Converter & Cable (no accelerometers). Option provides monitoring of the vibration levels and spectrum for the product under test. Also shows power spectrum vs. frequency profile. Includes signal input module along with cabling to connect to customer supplied computer. VibTrak software provides full profile control, datalogging, data file and profile export, real time trend graphs, and PSD (spectrum analysis) curves.</p> <p>Note: Must order number of accelerometers needed separately.</p>
<input type="checkbox"/>		<p>Spectrum Analyzer, 12-Channel, with VibTrak Software, EIA-485 to USB Converter & Cable (no accelerometers). Option provides monitoring of the vibration levels and spectrum for the product under test. Also shows power spectrum vs. frequency profile. Includes signal input module along with cabling to connect to customer supplied computer. VibTrak software provides full profile control, datalogging, data file and profile export, real time trend graphs, and PSD (spectrum analysis) curves.</p> <p>Note: Must order number of accelerometers needed separately.</p>

CHAMBER OPTIONS

<input type="checkbox"/>		<p>VibTrak software provides full profile control, datalogging, data file and profile export, real time trend graphs, and PSD (spectrum analysis) curves.</p>
<input type="checkbox"/>		<p>EZT Temperature & Vibration Monitor Package - Six (6) temperature thermocouples and two (2) additional GRMS vibration accelerometers for monitoring in addition to the standard Z-axis" monitor. Option includes readout with individual alarms, displays, and data logging for each input that can be monitored by the EZT-570S and the EZ-View software. Please contact the factory if additional monitoring points are required.</p>
<input type="checkbox"/>		<p>Stand with casters - Welded, painted steel cart with casters, 36"W x 31"D x 28"H (914mm x 787mm x 711mm)</p>
<input type="checkbox"/>		<p>Spare parts kit consisting of one large vibration hammer, one small vibration hammer and two spare accelerometer cables</p>
<input type="checkbox"/>		<p>Metric Fixturing kit includes 80-20 T-slotted bar, eight (8) studs, and twenty-five (25) corresponding nuts and washers with metric unit (M10 X 1.5) thread</p>
<input type="checkbox"/>		<p>Start-up and Training by CSZ factory technician or ISO (Independent Service Organization), non-union. Sales tax is not included. Customer must have all required utilities connected to the chamber prior to start-up and training session. Note: please complete the "Start-up Training Survey" and send to CSZ Service Department to request described service.</p>
<input type="checkbox"/>		<p>Estimated Shipping Cost -Customer must have loading dock & forklift to properly receive chamber -Shipping terms are F.O.B. Origin, Cincinnati, OH -Freight prepaid and add or (Air-Ride Equipped, LTL Service) -Sales tax is not included Note: Note: Customer is responsible to check the condition of the shipment and make written notation on the transport document before accepting the shipment. Failure to make notations on the carrier's Bill of Lading will limit your claim. The title to this equipment has been transfer to you from the CSZ Products and the shipper (CSZ Products) is not responsible for filing of damage claims with the carrier.</p>

CHAMBER OPTIONS

<input type="checkbox"/>		Fixture kit includes 80-20 T-slotted bar, eight (8) studs, and twenty-five (25) corresponding nuts and washers with Imperial unit (3/8-16) thread
<input type="checkbox"/>		TCB-1.3, IPPC closed crate, International Shipments

QUALITY

The quality design and engineering of our products are known throughout the industry. We ensure the quality and reliability of every product we manufacture with design review meetings, incoming and in-process inspections, vendor auditing, and validation testing. Our ISO-9001:2015 certification, combined with our quality processes ensures you are purchasing the most reliable chamber in the industry.

