

# **IDEX** TESTING GUIDE

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**VIBRATION TESTER  
VIBRATION TESTER FOR TRANSPORT PACKAGING TEST  
PARTS PALLETIZER**

《《 Vibration 》》



Detection for product failure and Guard for product safety and reliance!

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**IDEX CO., LTD**

CNOF-2040

# *IDEX Vibration Tester is a testing system for "Improvement for product safety" and "Maintaining & ensuring of reliance"*

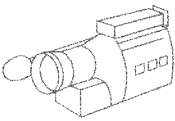
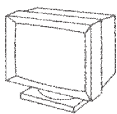


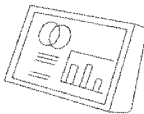
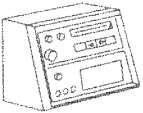
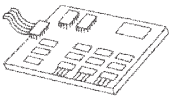

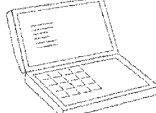
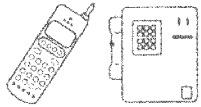

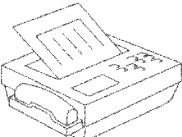
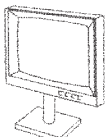
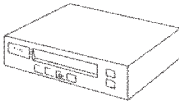
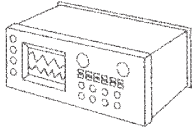
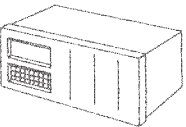
## *Usage*

- Vibration test & endurance test for various parts and instruments.
- Simulated inspection under production operation and resonance during transportation.
- Detection for latent failure.
- Measures against the rule of "Product Liability".
- Check for safety.
- Countermeasure against abolition of packing material like polystyrene foam.





## *Characteristics*

- Multi-purpose & simple operation, it does not require any basis construction, so, it can be installed any place.
- Good permanence and maintenance-free.
- Compact design (save-space, save-energy).
- Many kinds of application meet the purposes, like in-line type, off-line type, complex type, etc.

## *Inspection Products*

 Video Camera	 CRT-Display	 Digital speed meter for automobile	 Analog speed meter for automobile	 LCD-Display
 In-car audio system	 Printed circuit board	 Computer	 Notebook computer	 Mobile phone, Public phone
 Printer	 Facsimile	 Liquid-crystal color TV set	 DVD, VTR	 Measuring instrument
 Program controller	Kinds of sensor, Electronic parts	Electric power supply, Light source, CCD, Lens, Camera, Indicator, etc.	Transport Packaging Test Cosmetics, Medication, Daily commodity, Foods, Beverage, etc.	etc.

## INTRODUCTION EXAMPLE

PROCESS	DESIGN, DEVELOPMENT, QUALITY CONTROL	ACCEPTANCE TEST	PRODUCTION LINE	SHIPMENT, QUALITY GUARANTEE
<b>USAGE</b>	<ul style="list-style-type: none"> <li>Endurance test, Vibration test</li> <li>Check for Performance &amp; safety</li> </ul>	<ul style="list-style-type: none"> <li>Vibration test for PC board, Assembly parts</li> <li>Removal of solder ball</li> </ul>	<ul style="list-style-type: none"> <li>Pre-inspection</li> <li>Aging test, Sampling inspection</li> <li>Burn-in</li> <li>Completion test</li> </ul>	<ul style="list-style-type: none"> <li>Transport packaging test</li> <li>Measure to scratching, stain, pinhole</li> <li>Damage check for instruments and packaging</li> </ul>
<b>RECOMMEND MODEL</b>	 <p><b>BF-45UA-E</b></p> <p>BF-70UA-E, BF-50UD, BF-100PS etc.</p>	 <p><b>BF-25H</b></p> <p>BF-50UII etc.</p>	 <p><b>BF-50UD</b></p> <p>BFA-50UD In-line &amp; Automation model</p>	 <p><b>BF-50UT</b></p> <p>BF-70UA-E-T etc.</p>

## APPLICATION

### Cubic shape jig



Cubic shape jig fixed on the vibration table of this tester is very effective for the vibration proof test and endurance test of electronic/optical parts, all kinds of electronic instruments and parts mounting printed board. Vertical vibration and horizontal vibration are available for once operation by setting specimens on the 3 to 5 surfaces of a cubic shape jig. It is possible to reduce operation time.

### Jig for UP/DOWN vibration



It is possible to control horizontal vibration by setting "Jig for UP/DOWN vibration", and it is compliant with JIS & IEC. It is available as option for BF-50UII, BF-50UD, BF-50UT.

### Transport Packaging Test



It can simulation test under transport vehicle. You can fix a packaging product on the vibration table by using "Ratchet type fixed belts" supplied as standard accessory or L type jig. It can inspect not only the endurance test under transportation but also visual test for checking damage of product such as scratching of label, so, it is used to find a solution to the problem of packaging.

## INSPECTION EXAMPLE

Usage Inspection item	Electronic parts, Equipment, Communication equipment, PC board	OA equipment, AV equipment	Electronics (in-car product)	Measuring instrument	Transport packaging test, Examination of the packaging damage
Frequency(Hz)	10~55Hz, 17Hz, 33Hz, 67Hz	20~38Hz, 17Hz, 33Hz	25~48Hz, 17Hz, 33Hz, 67Hz	10~55Hz, 17~33Hz, 17Hz, 33Hz	5~10Hz, 10~20Hz, 20Hz, 33Hz
Displacement(mmp-p)	1.0~3.0	1.0~2.0	1.0~3.0	1.0~2.5	1.0~5.0
Acceleration(m/s <sup>2</sup> )	14.7~29.4 98	4.9~19.6	29.4~58.8	19.6~39.2	4.9~19.6
Impact acceleration(m/s <sup>2</sup> )	49~294	49~196	49~392	49~294	49~490

# VIBRATION TESTER *Multi-purpose and Simple operation, need no fundamental construction*

## Hand-type



- Partial vibration test for electronic products
- Possible to quantify the hammering and tapping
- It can be utilized as production process inspection by fixing the stand

## BF-25H



- Compact & low-cost model
- Removal of solder ball and foreign matter
- To find defective soldering not seated

## BF-50UD



- Generate a vibration by using eccentric excursions
- Composite vibration of horizontal and vertical direction (two-dimensional direction)
- It has a many results for evaluation test in the production process

## BF-50UT



- Simulation test for a packaging box and their contents during transport.
- Simulation test comparable to distance of conveyance 1,000km ~2,000km

## BF-45UA-E



- It can be used for vibration test, endurance test, and evaluation test extensively
- Compliance with JIS C-0040
- Possible to inspect electronic parts, and also components without circumstance

## BF-70UA-E



- Possible to load a large packaging box (Table size: 550×600mm)
- Loading weight 100kg(Max)
- Suitable for both small instruments and large instruments purpose for vibration test and endurance test

## For large-sized instruments

\*Made-to-order



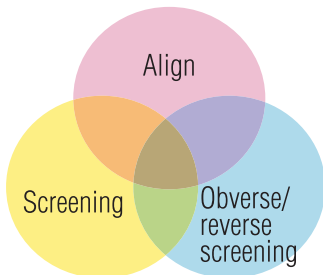
- Simulation test for vibration proof during transport environment

## BF-70UA-E-T

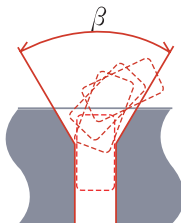


# PARTS PALLETIZER

*Perform triple function with innovative mechanism*



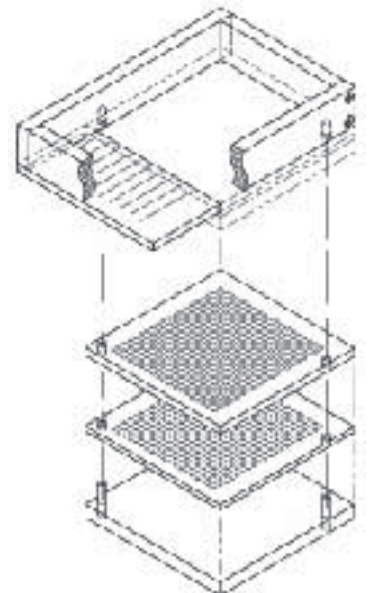
Chip dimension · Shape · Screening



Essential for aligning the chip and minute parts

- No damage for parts
- Reduction of operation time
- Palletize rate at nearly 100%
- Underwater alignment is possible

Pallet structure



## BFP-3C



## BFP-2AE



## Pallet



◇ IDEX provides our technical knowledge such as design of pallet which meets your requirements

Exclusive sales agent to handle the Parts Palletizer is Furuya Metal Co., Ltd. (Tokyo, Sendai, Osaka)

Manufacture

G 046 3000



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