MECHANICAL TESTING SOLUTIONS

CME Technology Co., Ltd.

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CME
RELIABILITY TESTING SOLUTIONS

ABOUT US

CME Technology Co., Ltd. is located in Shaanxi National Development Zone, specializing in manufacturing equipment for mechanical testing and simulation, environmental reliability testing, non-standard testing, and the capability of integrating planning, design, manufacturing, and installation and service as one. Tailor-made test solutions and non-standard test equipment for customers to help customers save resources and improve product reliability as much as possible.

Through years of efforts in R & D, a complete development system of environment and reliability test products has gradually formed. CME has become the professional manufacturer and service provider of environmental and reliability test equipment with the most extensive coverage and the most complete product series in China.

"CME" brand products have been provided many reliability test solutions for various fields such as aviation, aerospace, navigation, weapons, automotive, rail transportation, electronics, etc., which have been well received in the industry.

Mission: To become the leading provider of reliability testing solutions
Vision: Credit, Professional & Innovation

TIME LINE

2006 — CME Established

2007 — The main product series has been upgraded

2008 — CME expanded production & move to new factory

2009 — CME products cover all mechanical environmental test standards

2010 — Corporate with testing institutions such as UL, SGS, Intertek, etc.

2011 — 2nd time factory move; and cooperated with 1st class universities to optimize product performance

2012 — Products exported to Russia, Egypt, Venezuela, Myanmar...

2013 — CME environmental and reliability test R & D project was successfully approved by the STA as a major provincial science and technology project

2014 — 3rd time factory move; and cooperated with CAS and other research institutes

2015 — Awarded the municpal-level "Mechanical environment test system R & D and Innovation Team"

2016 — Obtained ISO9001: 2015

2017 — 4th time factory move & listed on the growth board of Shaanxi Equity Exchange Center (code 800059)

2018 — CME was recognized as a high-tech enterprise

2019 — CME invested 60 million to invest in the expansion of new factory

2020 — Established a new brand image of CME & Fully established independent overseas sales network

2021 — CME moved to its own new site in the national high-tech zone, further expanding the scale of production

2022 — Established a preliminary overseas sales network and achieved astonishing results

Shock / Bump Test System

Shock Response Spectrum Test System

Transportation Simulation Test System

Motion Simulation Test System

Constant Acceleration Tester

Drop Test System

Vibration Shakers

Packaging Test System

KRD10 HYDRAULIC VERTICAL SHOCK TEST SYSTEM

- **Windows-based stable control system** IPS-2000 shock control & measurement system can accurately complete the high energy shock test
- **Multi-track guide posts** combined with good lubricity and noise free hydraulic balance lifting system to achieve stable shifting.
- **Automatic control of lifting height** with high accuracy and good repeatability.
- **Adopts the high strength and hardness cast aluminum table,** which has high first-order resonance frequency, featured with low noise and no clutter.
- **The self-buffer & vibration isolation base** does not require a special foundation, and easy to install.
- **One-stop test**: built-in test standards meet various requirements to help users to complete test in one stop.
- **Built-in brake mechanism** to avoid secondary rebound collisions and more secure positioning of the table.
- **Multiple waveforms**: it can perform conventional half-sine waves, post-peak sawtooth waves, or trapezoid waves.

KRD10 series is a full-automatic hydraulic lifting vertical shock test system, it is used to measure and determine the impact resistance of products or packaging, and to evaluate the reliability and structural integrity of products in a shock environment. The system can perform conventional half-sine wave, post-peak sawtooth wave, and trapezoid wave shock tests to achieve the shock wave and shock energy that the product is subjected to in the actual environment, thereby improving the product or packaging structure.

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD10-2 (Manual)	KRD 10-5	KRD 10-25	KRD 10-50	KRD 10-100	KRD 10-200	KRD 10-400	KRD 10-500	KRD 10-600	KRD 10-1000	KRD 10-1500	KRD 10-3000
Rated Load (kg)		2	5	25	50	100	200	400	500	600	1000	1500	3000
Table Size (mm)		115×115	200×200	300×300	500×500	600×600	800×600	800×800	1000×800	1000×1000	1200×1000	1500×1200	2000×1500
Peak Acc. (g)	Half-sine	5~3k	5~2k	5~1.5k	10~750	10~600	10~450	10~400	10~300	10~300	10~250	10~150	15~100
	Post-peak Sawtooth	10~200					10~100						10~50
	Trapezoid	\			15~200		15~100			15~60		15~50	30~50
Pulse Duration (ms)	Half-sine	0.3~40	0.5~40	0.6~60	1.5~60	2~60	2.5~60	3~60	3.5~60	4~60	4.5~60	6~60	11~40
	Post-peak Sawtooth	3~18					6~18						
	Trapezoid	\			3~18		6~18						
Overall Dimension (mm)		450×180 ×2100	1000×900 ×2350	1400×1200 ×2300	1600×1400 ×2300	1700×1500 ×2300	1700×1500 ×2300	1900×1500 ×2550	1900×1500 ×2550	1900×1800 ×2550	1900×1800 ×2650	2200×2100 ×2650	2700×2500 ×3000
Weight (kg)		200	1000	1800	3000	4200	4300	5200	5300	7000	8000	10000	15000
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)											
Power		Control measurement: 1-phase AC220V±10% 50Hz Oil source: 3-phase AC380V±10% 50Hz											
Installation Condition		Foundation-free, the cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment											
Standards		MIL-STD-810 IEC68-2-27 UN38.3 IEC62281 IEC62133-2 UL2054 IEEE1625 SAEJ2929 IEC62660-2 ISO12405-3 UL2580											

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Post-peak Sawtooth and Trapezoid waveforms are optional.

DUAL-MASS SHOCK AMPLIFIER

Dual mass shock amplifier is a device that uses the rebound energy of the two shock tables to reach the extremely high shock acceleration. The amplifiers consist of secondary small shock table and a massive base which is bolted to the top of the original table of the shock machine. The specimen is mounted on top of the secondary shock table.

SHOCK AMPLIFIER SPECIFICATIONS

Parameters \ Model	KRD13-1	KRD13-2	KRD13-3
Rated Load (kg)	2	5	10
Useful Table Size (mm)	80×80	150×150	300×300
Shock Waveform	half sine waveform		
Max. Peak Acceleration (g)	50000	10000	3000
Min. Pulse Duration (ms)	0.05	0.1	0.5
Amplifier Weight (kg)	30	50	100

KRD11
PNEUMATIC VERTICAL SHOCK TEST SYSTEM

KRD11 series pneumatic vertical shock test system is featured with advanced design, high degree of automation and reliability, simple operation and convenient maintenance. The system meets the requirements of both shock and bump test, can perform conventional half-sine wave, post-peak sawtooth wave, trapezoid wave and other waveform shock tests.

- Pneumatic drive, simple structure and high reliability.
- Pollution free, without hydraulic leak risk and keep the environment clean.
- Pneumatic drive greatly improves the shock test efficiency, maximum shock rate up to 120 times / min.
- It can easily realize large pulse width and small overload test.
- With a fast shock rate comparing to motor or hydraulic driven table, both shock and bump functions are available in one.
- By utilizing different configurations of shock pads and adjusting the free-fall height, we can achieve a wide range of shock targets.
- IPS-2000 shock control and measurement system can perform manual shock, continuous shock, single shock, and interval shock.
- Built-in brake mechanism ensures the safety of operation in any situation.

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD 11-5	KRD 11-15	KRD 11-25	KRD 11-50	KRD 11-100	KRD 11-200	KRD 11-400	KRD 11-600	KRD 11-800	KRD 11-1000	KRD 11-2000
Rated Load (kg)		5	15	25	50	100	200	400	600	800	1000	2000
Table Size (mm)		150×150	200×200	300×300	500×500	600×600	800×600	800×800	1000×800	1000×1000	1200×1200	1500×1200
Peak Acc. (g)	Half-sine	5 ~ 2500	5~2000	5~1500	10~750	10~600	10~450	10~400	10~300	10~300	10~250	10~150
	Post-peak Sawtooth	10~200					10~100				10~50	
	Trapezoid	\			15~200		15~100		15~60		15~50	
Pulse Duration (ms)	Half-sine	0.4~40	0.5~40	0.6~60	1.5~60	2~60	2.5~60	3~60	3.5~60	4~60	4.5~60	6~60
	Post-peak Sawtooth	3~18						6~18				
	Trapezoid	\			3~18		6~18					
Bump Waveform (Optional)		Half-sine Waveform										
Bump Peak Acceleration (g)		5~150		5~120	5~100			5~80	5~60		5~40	\
Bump Pulse Duration(ms)		2~30			3~30				4~30		5~30	\
Bump Rate (times/min)		10~120		10~100	10~80		10~60		10~40		10~30	\
Overall Dimension (mm)		1000 ×1000 ×2100	1000 ×1000 ×2160	1510 ×1300 ×2400	1690 ×1240 ×2350	1710 ×1160 ×2350	1910 ×1500 ×2700	1910 ×1500 ×2500	1900 ×1500 ×2450	2000 ×1500 ×2450	1900 ×1800 ×2550	2200 ×1800 ×2550
Weight (kg)		1300	2300	3000	3070	3900	4500	5000	5200	5600	6200	7300
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)										
Power		1-phase AC220V±10% 50Hz										
Air Source		≤0.8MPa										
Installation Condition		Foundation-free, the cement floor shall be leveled and the working distance of 800~1000mm shall be reserved around the equipment										
Standards		MIL-STD-810 IEC68-2-27 UN38.3 IEC62281 IEC62133-2 UL2054 IEEE1625 SAEJ2929 IEC62660-2 ISO12405-3 UL2580										

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Bump function, Post-peak Sawtooth and Trapezoid waveforms are optional.

KRD12 PNEUMATIC HORIZONTAL SHOCK TEST SYSTEM

KRD12 series shock test system is used to measure and determine the horizontal impact resistance of a product or package, and to evaluate the reliability and structural integrity of the test unit in a horizontal impact environment. The system can perform conventional half-sine wave, post-peak sawtooth wave, or trapezoid wave shock test to realize the shock energy that the product is subjected to in the actual environment, thereby improving the product or packaging structure.

- **Windows-based stable control system** IPS-2000 shock control & measurement system can accurately complete the high energy shock test
- **Pneumatic cylinder driving** with advantages of large driving force, short accelerating stroke, low cost and pollution free.
- **Trapezoidal guide shafts:** large supporting force, good lubricity and full-automatic positioning table.
- **Automatic control of shock speed:** the shock overload value is achieved by adjusting the air pressure. After the cylinder pressure is set, system will automatically control the shock speed with high accuracy and good repeatability.
- **Adopts the high strength and hardness cast aluminum table**, which has high first-order resonance frequency, featured with low noise and no clutter.
- **The driving cylinder** enables the table to obtain the required energy, decelerates as buffers, and automatically resets. Once the shock action is completed, the reset cylinder pulls the table to reset and enters the next shock preparation state.
- **Multiple waveforms**: can perform conventional half-sine waves, post-peak sawtooth waves, or trapezoid waves.

- **Easy installation:** free-foundation base is optional, due to short driving stroke of the pneumatic cylinder, the footprint is small.
- **Integrated control & measurement system:** the system comes with a variety of waveform tolerance bands that comply with the MIL-810 standard, automatically generates test reports after the test is completed.
- **System scalability:** the system can be designed as a bidirectional shock according to user needs, saving test time more effectively.

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD12-10	KRD12-50	KRD12-100	KRD12-200	KRD12-500	KRD12-1000	KRD12-2000	KRD12-3000
Rated Load (kg)		10	50	100	200	500	1000	2000	3000
Table Size (mm)		200×200	500×500	600×600	800×800	1000×1000	1200×1200	1500×1500	2000×2000
Peak Acc. (g)	Half-Sine	10~5000	10~1500	10~1000	10~800	10~600	10~500	10~200	10~150
	Post-Peak Sawtooth	10~200			10~100				10~50
	Trapezoid	\	15~200	15~200	15~100	15~60	15~60	15~50	30~50
Pulse Duration (ms)	Half-Sine	0.3~40	1~60	1.5~60	2~60	2.5~60	3~60	6~60	8~60
	Post-Peak Sawtooth	3~18				6~18			
	Trapezoid	\	3~18		6~18				
Bump Waveform (Optional)		Half-sine Waveform							
Peak Acceleration (g)		5~150	5~100		5~80		5~60	\	
Pulse Duration (ms)		2~30			3~30		4~30	\	
Bump Rate (Times/Min)		10~120	10~80		10~60		10~40	\	
Overall Dimension (mm)		2950×1240 ×1000	3300×1150 ×850	3500×1240 ×1100	3740×1440 ×1050	4250×1450 ×1100	4500×1650 ×850	5500×2000 ×850	6000×2200 ×850
Weight (kg)		3700	3600	4800	5856	6500	7000	8000	9000
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)							
Power		1-phase AC220V±10% 50Hz							
Air Source		≤1MPa							
Installation Condition		Special foundation, foundation-free base is optional. The working distance of 800~1000mm shall be reserved around the equipment.							
Standards		MIL-STD-810 IEC68-2-27 UN38.3 IEC62281 IEC62133-2 UL2054 IEEE1625 SAEJ2929 IEC62660-2 ISO12405-3 UL2580							

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Bump fundtion, Post-peak Sawtooth and Trapezoid waveforms are optional.

KRD13 HIGH ENERGY SHOCK TEST SYSTEM

KRD13 series high energy shock test sytem is specially designed to meet the requirements of military industry and automotive industry. The system adopts the principle of pneumatic energy storage expansion. By adjusting the inflation pressure, various high-level acceleration tests can be easily implemented in a short stroke.

This equipment combines classical free-fall shock and pressuried shock into one, can acheive higher shock energy than free-fall shock method.

- **Windows-based stable control system**
  IPS-2000 shock control & measurement system can accurately complete the high energy shock test
- **Pneumatic cylinder driving** with advantages of large driving force, short accelerating stroke, low cost and pollution free.
- **Stable guide pillar:** combined with pneumatic balance lifting system, automatically positioning the table.
- **Adopts the high strength and hardness cast aluminum table**, which has high first-order resonance frequency, featured with low noise and no clutter.
- **Advanced energy storage expansion shock method** it can achieve high shock energy that can not be achieved by classical free-fall shock, especially to meet the various shock test standards for new energy batteries.
- **Easy installation:** the equipment comes with a high-performance buffer and vibration isolation base, no special foundation is required, and the installation is convenient, safe and reliable.

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD 13-50	KRD 13-100	KRD 13-200	KRD 13-500	KRD 13-800	KRD 13-1000	KRD 13-2000
Rated Load (kg)		50	100	200	500	800	1000	2000
Table Size (mm)		500×500	600×600	800×800	1000×1000	1200×1200	1500×1500	2000×2000
Peak Acc. (g)	Half-sine	10 ~ 1500	10 ~ 1000	10 ~ 1000	10 ~ 500	10 ~ 400	10 ~ 300	10 ~ 200
	Post-peak Sawtooth	10 ~ 200		10 ~ 100				10 ~ 50
	Trapezoid	15 ~ 200		15 ~ 100		15 ~ 60	15 ~ 50	30 ~ 50
Pulse Duration (ms)	Half-sine	2 ~ 60	3 ~ 60	3 ~ 60	4 ~ 60	5 ~ 60	6 ~ 60	8 ~ 60
	Post-peak Sawtooth	3 ~ 18			6 ~ 18			
	Trapezoid	3 ~ 18		6 ~ 18				
Bump Waveform (Optional)		Half-sine Waveform						
Bump Peak Acc.(g)		5 ~ 100		5 ~ 80	5 ~ 60	5 ~ 40	\	
Bump Pulse Duration (ms)		3 ~ 30			4 ~ 30	5 ~ 30	\	
Bump Rate (Times/Min)		10 ~ 80		10 ~ 60		10 ~ 40	\	
Overall Dimension (mm)		1200×1200 ×1500	1200×1200 ×1650	1100×1100 ×1700	1300×1300 ×1600	1500×1500 ×1700	1600×1600 ×1800	2000×2000 ×1900
Weight (kg)		3000	3800	3200	4000	5000	6000	8500
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)						
Power		1-phase AC220V±10% 50Hz						
Air Source		≤1MPa						
Installation Condition		Foundation-free, the cement floor shall be leveled and the working distance of 800~1000mm shall be reserved around the equipment						
Standards		MIL-STD-810 IEC68-2-27 UN38.3 IEC62281 IEC62133-2 UL2054 IEEE1625 SAEJ2929 IEC62660-2 ISO12405-3 UL2580						

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Bump function, Post-peak Sawtooth and Trapezoid waveforms are optional.

KRD16 HIGH IMPACT SHOCK TEST SYSTEM

High impact shock test system meets MIL-S-901D standard which covers shock testing requirements for ship board machinery, equipment, systems, and structures, excluding submarine pressure hull penetrations. The purpose of these requirements is to verify the ability of shipboard installations to withstand shock loadings which may be incurred during wartime service due to the effects of nuclear or conventional weapons.

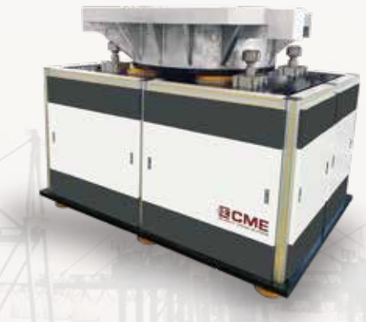
TECHNICAL SPECIFICATIONS

Model / Parameters	KRD16-1	KRD16-2
	Lightweight	Medium weight
Max Load (kg)	200	3000 (Including fixture≤3400)
Pendulum Mass (kg)	182	1360
Shock Form	Preset energy automatic completion	
Drop Hammer Height (mm)	0 ~ 1500	0 ~ 1870
Table Size (mm)	4A (Flat plate) 860×570	1520×1520
	4C-Ⅰ (Angle plate) 670×300	
	4C-Ⅱ (Angle plate) 670×300	
	4C-Ⅲ (Angle plate) 670×550	
Overall Dimension (mm)	4800×1300×4500	3650×3300×3200
Environment	Temperature range: 0 ~ 40℃, Humidity≤80% (non-condensing)	
Power	3-phase AC380V±10% 50Hz	
Installation Site	According to the foundation drawings provided by the manufacturer	
Weight (kg)	3000	15000
Standards	MIL-S-901D	

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD20 PNEUMATIC BUMP TEST MACHINE

The KRD20 series pneumatic bump test machine replaces the traditional mechanical cam-type crash bench and is suitable for repeated impacts on electronic components, equipment and other electrical and electronic products during transportation or working.



- Fully pneumatic driven, clean and environmentally friendly, good repeatability and high reliability.
- Control the frequency of bumpss by adjusting the gas pressure to achieve continuous high-frequency bumps.
- Test time and collision frequency can be set arbitrarily, and it will stop automatically after the test is completed.

TECHNICAL SPECIFICATIONS

Model / Parameters	KRD20-50	KRD20-100	KRD20-200	KRD20-500	KRD20-800	KRD20-1000	KRD20-1500	KRD20-2000	KRD20-3000
Load (kg)	50	100	200	500	800	1000	1500	2000	3000
Table Size (mm)	500×500	600×600	800×800	1000×1000	1500×1500	1800×1800	2000×2000	2500×2000	2500×2500
Bump Waveform	Half-sine Waveform								
Peak Acceleration(g)	3 ~ 150	3 ~ 120	3 ~ 100	3 ~ 80	4 ~ 60	5 ~ 50		5 ~ 40	5 ~ 30
Pulse Duration (ms)	2 ~ 30			3 ~ 30	5 ~ 30	6 ~ 30		8 ~ 30	11 ~ 30
Bump Rate (Times/Min)	1 ~ 120			1 ~ 100		1 ~ 80	1 ~ 60	1 ~ 30	1 ~ 20
Overall Dimension(mm)	1050×1050 ×1300	1090×1090 ×1300	1050×1050 ×1280	1300×1300 ×1650	1500×1500 ×1600	1800×1800 ×1600	2000×2000 ×1850	2500×2000 ×1950	2500×2500 ×2100
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)								
Power	1-phase AC220V±10% 50Hz								
Air Source	≤0.8MPa								
Installation Condition	Foundation-free, the cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment								
Weight（kg）	1500	1980	1925	3475	2800	7500	8500	9500	11000
Standards	MIT-STD-810 IEC68-2-27								

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD17
BIDIRECTIONAL VERTICAL SHOCK TEST SYSTEM

KRD17 series pneumatic bidirectional vertical shock test system is the novel designed and developed for large specimens that cannot or are not easy to turn over, especially adopt for battery testing. It can complete vertical upward and downward shock test in one test stand without moving the UUT.

- Pneumatic drive, no pollution to the environment
- One machine with multiple functions, one clamping, to complete the upward and downward shock and bump tests, with high efficiency
- Built-in pneumatic brake mechanism, safe and reliable
- One-machine management for control and measurement, convenient operation
- Air springs and dampers are used to reduce vibration, and free-foundation is optional

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD17-50	KRD17-100	KRD17-200	KRD17-500	KRD17-800	KRD17-1000	KRD17-2000
Rated Load (kg)		50	100	200	500	800	1000	2000
Table Size (mm)		500×500	600×600	800×800	1000×1000	1200×1200	1500×1500	2000×2000
Shock Direction		Downward						
Peak Acc. (g)	Half-Sine	10 ~ 750	10 ~ 600	10 ~ 450	10 ~ 300	10 ~ 250	10 ~ 200	10 ~ 150
	Post-Peak Sawtooth	10 ~ 200	10 ~ 200	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100	10 ~ 100
	Trapezoid	15 ~ 200	15 ~ 200	15 ~ 100	15 ~ 100	15 ~ 60	15 ~ 60	15 ~ 50
Pulse Duration (ms)	Half-Sine	1.5-60	2-60	2.5-60	4-60	4.5-60	5-60	6-60
	Post-Peak Sawtooth	3～18			6～18			
	Trapezoid	3～18		6～18				
Shock Direction		Upward						
Shock Wave		Half-sine Waveform						
Shock Peak Acceleration (g)		15 ~ 350	15 ~ 300	15 ~ 200	15 ~ 150	15 ~ 100	15 ~ 100	15 ~ 75
Shock Pulse Duration(ms)		3.5-60	3.5-60	4-60	4.5-40	5.5-60	5.5-60	6-60
Overall Dimension (mm)		1250×1250 ×1600	1250×1250 ×1600	1300×1300 ×1700	1350×1350 ×1750	1550×1550 ×1750	1650×1650 ×1850	2000×2000 ×1900
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)						
Power		1-phase AC220V±10% 50Hz						
Air Source		≤1MPa						
Installation Condition		Special foundation, optional foundation-free. The cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment						
Weight (kg)		3000	3200	3500	4500	5000	6000	8000
Standards		MIL-STD-810 IEC68-2-27 UN38.3 IEC62281 IEC62133-2 UL2054 IEEE1625 SAEJ2929 IEC62660-2 ISO12405-3 UL2580						

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Post-peak Sawtooth and Trapezoid waveforms are optional.

KRD14 PNEUMATIC VERTICAL SHOCK RESPONSE SPECTRUM TEST SYSTEM

KRD14 series pneumantic shock response spectrum tester is used to measure and determine the shock resistance of electrical and electronic products or packaging, and to evaluate the reliability and structural integrity of the test product in a shock environment. The shock response spectrum is the total result of a series of single-degree-of-freedom linear systems with different natural frequencies subjected to the same shock excitation response. When a product is subjected to an impact, the maximum value of its impact response means that the product has a maximum stress. Therefore, the shock response spectrum tester can better simulate the shock wave and shock energy suffered in the real environment.

- 1200mm table size withstand 1000kg load.
- Windows-based stable control system, full-automatic remote-control interface.
- The equipment takes up a small area and is easy to install.
- The control & measurement system has built-in SRS specifications and tolerances, which is convenient for users to adjust and apply. It automatically completes the test and generates reports.
- Adjust the driving shock energy by adjusting the air pressure, which is convenient to operate and high in efficiency.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD14-20	KRD14-50	KRD14-100	KRD14-200	KRD14-500	KRD14-1000
Load (kg)	20	50	100	200	500	1000
Table Size (mm)	300×300	500×500	600×600	800×800	1000×1000	1200×1200
Response Frequency Range (Hz)	10 ~ 10000					
Max. Response Acceleration (g)	50,000	30,000	25,000	15,000	10,000	5,000
Gradient of Rising Stage (dB/Otc)	6 ~ 9					
Tolerance Range (dB)	±6 ~ 9					
Overall Dimension (mm)	1300×850×1500	1420×865×1485	1200×1200×1650	1750×1100×1700	1900×1300×1800	2200×1500×2000
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)					
Power	1-phase AC220V±10% 50Hz					
Air Source	≤1MPa					
Installation Condition	Foundation-free, the cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment					
Weight (kg)	2000	3240	3800	4800	4500	5000
Standards	MIL-STD-810					

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD15 PNEUMATIC HORIZONTAL SHOCK RESPONSE SPECTRUM TEST SYSTEM

KRD15 series is the state-of-the-art shock response spectrum tester that adopts compressed gas energy to provide impact energy, push the shock hammer to impact the resonance plate, and generate high energy shock. Comparing to traditional pendulum shock response spectrum tester, this machine has the advantages of high energy, stable performance, high reliability, good repeatability, easy adjustment, safety and environmental protection. It is mainly applied in the industries of aerospace, aviation and ships.

- The system adopts pneumatic energy storage to drive the impact hammer, with large driving force, fast response speed and reliable structure;
- Adjust the driving shock energy by adjusting the air pressure, which is convenient to operate and high in efficiency.
- A two-level safety cut-out is designed to fully protect the safety of operators.

- Special designed base for the response spectrum, which can raise the installation position of the response board, convenient for the user to install the test piece and adjust the gasket. In addition, the rigidity of the installation position of the response board is greatly enhanced, which makes it better fixed to the ground foundation and withstands larger Impact load.
- The operating software has the functions of shock response spectrum tester control, shock data collection, and response spectrum analysis.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD15-50	KRD15-100	KRD15-200	KRD15-500	KRD15-1000
Load (kg)	50	100	200	500	1000
Table Size (mm)	500×500	600×600	800×800	1000×1000	1200×1200
Response Frequency Range (Hz)	10 ~ 10000				
Max. Response Acceleration (g)	15,000	12,000	10,000	8000	6000
Gradient of Rising Stage (dB/Otc)	6 ~ 9				
Tolerance Range (±dB)	6 ~ 9				
Overall Dimension (mm)	3700×1200×850	4050×1195×1000	4300×1440×950	4500×1640×850	4700×1840×850
Power	1-phase AC220V±10% 50Hz				
Air Source	≤1MPa				
Weight (kg)	4000	5300	6520	7000	8000
Working Environment	Special foundation, foundation-free base is optional. Temperature range 0 ~ 40℃, Humidity ≤ 80% (non-condensing)				

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD30 CONSTANT ACCELERATION TESTER (BOX TYPE)

KRD30 series constant acceleration test machine is used to evaluate when components, equipment and other electrical and electronic products are subjected to constant acceleration environment (except gravity), whether the structure adaptability and performance are good, and obtain the units' electrical parameters.

- **Advanced control system:** Full-automatic computer remote real-time control interface. The operator only needs to input simple values to start the equipment and complete the acceleration test accurately.
- **User-friendly display interface:** the control interface can display the test curve, tolerance and test time in real time.
- **Powerful multi-acceleration continuous test system:** It can realize multi-level acceleration continuous test according to the different requirements of the test sample.
- **Reliable protection measures:** open circuit, over-limit and over-speed protection can be realized.
- **Multiple control methods:** In the case of automatic control failure or no need of automatic control, the device can still use manual control to complete the test.
- **Convenient and quick result output system:** After the test, the test report is automatically generated and printed out.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD30-03	KRD30-05	KRD30-10	KRD30-20	KRD30-2M	KRD30-3M	KRD30-4M	KRD30-8M
Load (kg)×Position	3×6	5×4	10×2	20×2	0.05×N	0.04×N	0.03×N	0.02×N
Acceleration (g)	1 ~ 500		1 ~ 100		200 ~ 20k	200 ~ 30k	200 ~ 40k	200 ~ 80k
Max. Height for Specimen (mm)	200		300		—			
Installation Radius (mm)	200		500		130			
Test Direction	±X、±Y、±Z							
Launch/Stop Time (min)	≤3							≤5
Continues Worktime (min)	60				5			
Acceleration Accuracy (%)	≤3							
Slip Ring	Optional according to user requirements				—			
Dimension (mm)	1100×1100×1200		1850×1520×950		1000×1000×1100			
Control Mode	Fully closed-loop digital network (remote) automatic control + manual control							
Weight (kg)	1000		1500		1000			
Working Environment	Temperature range 0 ~ 40℃, Humidity≤80% (non-condensing)							
Power	3-phase AC380V±10% 50Hz							
Installation Condition	Foundation-free, the cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment							
Standards	MIL-STD-810 IEC68-2-7 MIL-STD-202 MIL-STD-750 MIL-STD-883							

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. In addition to providing electrical signals, the slip ring can also optionally add transmission functions such as oil, gas, special signals, Ethernet, and RF signals.

KRD31 CONSTANT ACCELERATION TESTER (ARM TYPE)

KRD31 series constant acceleration tester are used to test articles under extreme acceleration conditions based on standard like MIL-STD-810F, MIL-STD-202 and IEC68-2-7.

It is most suitable for testing electronic components or devices. Under high g effect on microcircuits, to check adaptability and reliability of wiring and the internal structures. It may expose mechanical and structural defects that are not found with vibration and shock tests.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD31-30	KRD31-50	KRD31-100	KRD31-100A	KRD31-200	KRD31-500	KRD31-1000	KRD31-1500
Max. Load (kg)	30	50	100		200	500	1000	1500
Acceleration (g)	3 ~ 100						3 ~ 50	
Acceleration Accuracy (%)	≤±3							
Installation Platform Size (mm)	500×500	600×600	700×700		800×800	1000×1000	1200×1200	1500×1500
Specimen Installed Radius(mm)	1000	1200	1650	2150	2600	3000	5400	6250
Launch/Stop Time (min)	≤3				≤5		≤8	≤10
Max. Turning Diameter (mm)	2500	3000	4000	5000	6000	7000	12000	14000
Slip Ring	Optional according to user requirements							
Continues Working Time(min)	60						30	
Inner Diameter of Foundation (mm)	Φ3000	Φ3500	Φ4500	Φ5500	Φ7000	Φ8500	Φ14000	Φ16000
Control Mode	Fully closed-loop digital network (remote) automatic control + manual control							
Weight (kg)	2500	4000	5000	5500	7000	8000	10000	12500
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)							
Power	3-phase AC380V±10% 50Hz							
Installation Condition	According to the foundation drawings provided by the manufacturer							
Standards	MIL-STD-810 IEC68-2-7 MIL-STD-202 MIL-STD-750 MIL-STD-883							

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. In addition to providing electrical signals, the slip ring can also optionally add transmission functions such as oil, gas, special signals, Ethernet, and RF signals.

KRD32 NON-STANDARD CONSTANT ACCELERATION TESTER

KRD32 series non-standard constant acceleration testing machine is test equipment for military products to simulate dynamic centrifugal motion, dual-environmental force centrifugal motion and central high-speed rotating motion, so as to assess the anti-load performance of electronic components, small components and other electrical and electronic products and detect the anti-load performance specifications. It is mainly used for routine dynamic structural integrity and adaptability tests of components, small parts and small complete machine on aircraft.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD32-1 Dual-environment constant acceleration tester	KRD32-2 High-speed spin tester	KRD32-3 Centrifugal dynamic overload tester	KRD32-4 Spin shock compound tester	KRD32-5 Centrifugal vibration compound tester
Max. Load (kg)	5	5	50	3	1000
Max. Acceleration (g)	150	——	20	Shock 10000g–1ms	50
Loading Rate (g/s)	Customized	——	10	——	Standard Electro-Dynamic Shakers specifications
Rotating Speed (R/Min)	0 ~ 3000	0 ~ 100000	——	0 ~ 10000	——
Installation Radius (mm)	Customized	——	1500	——	Customized
Collector Ring	Optional according to user requirements				
Control Mode	Fully closed-loop digital network (remote) automatic control + manual control)				
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)				
Power	3-phase AC380V ±10% 50Hz				
Installation Condition	Foundation-free, working distance of 800 ~ 1000mm shall be reserved around the equipment	According to the foundation drawings provided by the manufacturer			
Standards	MIL-STD-810 IEC68-2-7				

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. In addition to providing electrical signals, the collector ring can also optionally add transmission functions such as oil, gas, special signals, Ethernet, and RF signals.

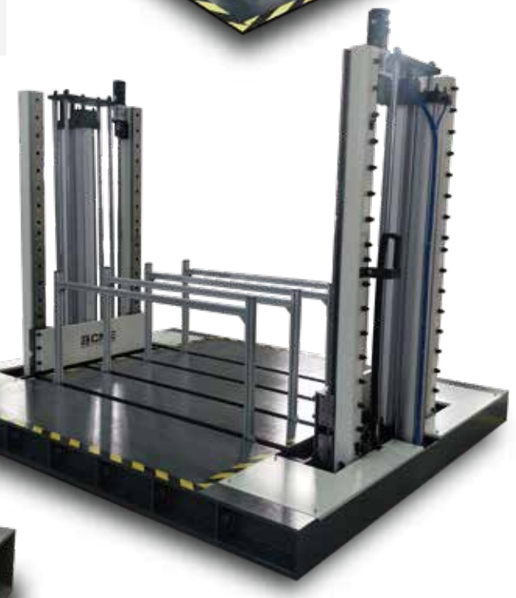
- The acceleration rising rate is large
- Computer centralized control and measurement
- Fully digital network closed-loop remote control, high control accuracy
- Complete safety protection functions

KRD40/41/42
DROP TEST SYSTEM

KRD41 series small drop tester is suitable for free-fall test of small consumer electronics and components.

KRD40 series drop tester, mainly simulates the resistance to drop and impact of large and heavy packaging products. It can realize the drop test of the edge, surface and angle of the sample. This equipment is mainly used to evaluate the ability of product or packaging to withstand drops during transportation and loading and unloading, so as to improve product and packaging design.

KRD42 series double-lift zero drop tester is mainly suitable for large size packaging products to resist drop impact performance, its powerful power system and unique sample support for easy loading and unloading of oversized, overweight items, and automatically rise to the set height, complete the drop test.



- Driven by pneumatic and servo motors, stable lifting process with upper and lower displacement restrictions, safe and reliable;
- Adopt single-track or dual-track lifting method, and the height can be adjusted arbitrarily;
- It can clamp and drop the test specimen in different directions such as edges, faces and angles;
- Fully automatic Omron PLC control; high-precision displacement sensor is equipped with high-precision collector;
- No special foundation required, no other complicated operation or installation;
- Optional handheld pad control + human-computer interaction system

TECHNICAL SPECIFICATIONS

Parameters \ Model	Small drop tester		Zero-distance drop tester			Double lift zero-distance drop tester			
	KRD 41-100	KRD 41-200	KRD 40-100	KRD 40-200	KRD 40-300	KRD 42-500	KRD 42-800	KRD 42-1000	KRD 42-2000
Max. Load (kg)	100	200	100	200	300	500	800	1000	2000
Drop Height (mm)	300 ~ 1500		0 ~ 1500			0 ~ 1200	0 ~ 1000		0 ~ 800
Max. Specimen Size (mm)	Depth 840	Depth 840	1000×1000 ×1000	1200×1200 ×1200	1300×1300 ×1300	1400×1400 ×1400	1500×1500 ×1500	1600×1600 ×1600	1800×1800 ×1800
Position Accuracy	±2% or ±10mm (subject to the larger value)								
Drop Zone Size (W*D/mm)	1200×1200	1400×1400	1200×1200	1400×1400	1500×1500	2400×1600	2600×1700	2800×1800	3200×2000
Test Mode	Face, Edge and Angle								
Working Environment	Temperature range 0 ~ 40℃, Humidity≤80% (non-condensing)								
Power	1-phase AC220V±10% 50Hz				3-phase AC380V±10% 50Hz				
Installation Condition	Foundation-free, the cement floor shall be leveled and the working distance of 800 ~ 1000mm shall be reserved around the equipment								
Standards	ISO2248-1985(E) IEC68-2-27 ISTA								

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD50

TRANSPORTATION SIMULATION TEST SYSTEM

KRD50 series transportation simulation test system is to simulate the actual road conditions such as shocks and vibrations during the transportation of various items of a specific load, and to evaluate the effect of the actual working conditions on the loading, unloading, transportation, packaging, sealing or internal structure of the goods. In order to assess or confirm the products and packaging.

The method of subband approach is used to simulate broadband random vibration. Each subband contains a main natural frequency and meets the power spectrum of the subband. The vibration magnitude and running time of the test bench are consistent with the actual road spectrum.

- Adopt truck chassis suspension technology, the acceleration factor can be adjusted;
- AC variable frequency control;
- No special foundation is needed, no other complicated operation or installation.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD50-200	KRD50-300	KRD50-600	KRD50-1000	KRD50-2000	KRD50-3000	KRD50-4000	KRD50-6000
Max. Load (kg)	200	300	600	1000	2000	3000	4000	6000
Vibration Waveform	Broadband Random							
Instantaneous Probability Density Function	Approximately normal distribution							
GRMS of Acceleration (g)	0.32 (0.5-400Hz)							
Simulated Truck Speed (km/h)	20 ~ 80							
Simulated Pavement	Intermediate pavement in tertiary highways & intermediate and low pavement in fourth highways							
Acceleration Level	1:1							
Height of Specimen (mm)	< 500	< 600	< 700	< 800	< 900	< 1000	< 1200	< 1500
Working Table Size (mm)	1500×700	2000×1200	2200×1200	2700×1650	2700×1800	3600×2600	4000×2800	5000×3500
Consumption Power (kVA)	6	10	12	25	30	40	70	90
Overall Dimension (mm)	1700×850 ×1040	2000×1550 ×1000	2200×1500× 950	2900×1300 ×2200	2950×2250× 1250	3600×2600× 1450	4000×2800× 1550	5000×3500× 1750
Weight (kg)	1150	2000	3000	5500	6000	8000	10000	15000
Power Supply	3-phase AC380V±10% 50/60Hz							
Standards	GB/T4857.15-89 QJ/T815.1-94 QJ/T815.2-94 GJB150.16-86							
Working Environment	Temperature range 0 ~ 40℃, Humidity≤80% (non-condensing)							

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD51

TRANSPORTATION BOUNCE TEST SYSTEM

Bounce testing simulates the constant loose cargo state during truck transport. Often times, containers carrying military and civilian hardware (such as: medical supplies, electronics, weaponry, communication devices) travel for extended periods of time and must be transported off-road. All of these items must maintain functionality upon arrival at their destinations.

The International Safe Transit Association (ISTA) developed a civilian package test procedure resembling the military test: 1A for products weighing less than 150 lb (68 kg) and 1B for over 150 lb (68 kg). Additional tests in subsequent procedures such as 1C, 1D, 2A and further combine the loose cargo basic test with atmospheric conditioning and other factors.

MIL-STD-810 and ISTA Procedures 1A and 1B offer package test procedures for packages subjected to repeated vibration (bouncing Testing) for a distance of up to 150 miles (240 km), while unrestrained and repeatedly colliding with other cargo and the walls and floor of a four-sided compartment.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD51-100	KRD51-200	KRD51-500	KRD51-1000	KRD51-2000
Max. Load (kg)	100	200	500	1000	2000
Displacement (mm) (P-P)	25.4				
Frequency	2 ~ 5Hz (120 ~ 300RPM)				
Test Motion	Circular Motion				
Height of Specimen COG(mm)	＜500	＜600	＜700	＜700	＜700
Working Table Size (mm)	1700×1200	1900×1300	2000×1500	2700×1650	2700×1800
Consumption Power (kVA)	8	10	12	100	20
Overall Dimension (mm)	2100×1500×1200	2170×1570×1400	2300×1800×1800	2700×1800×1800	3120×2100×1850
Weight (kg)	1600	2800	3500	5000	8500
Power Supply	3-phase AC380V±10% 50/60Hz				
Standards	ISTA-1A,1B, 2A, 2B 6-FedEx-B ASTM-D999-A2 ISO-2247 MIL-STD-810 IEC 60068-2-55				
Working Environment	Temperature range 0 ~ 40℃, Humidity≤80% (non-condensing) / Special foundation is needed				

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD60 3-DOF TEST SYSTEM

KRD60 series 3 DOF test system simulates various mechanical, electrical, and electronic products installed on ships, seaplanes, and other equipment to perform sway and tilt tests to determine the ability and structural integrity of the product to withstand severe sway and tilt requirements. The tilt test is mainly applicable to large-angle tilt caused by ship damage, manipulation, imbalance in loading and unloading, and wind. The sway test is mainly applicable to long-term swaying of the ship due to external forces such as wind and waves, which must be maintained normally or products that work reliably, and products that have a significant impact on their performance in a rocking environment.

- Based on the stable Windows OS and support automatic remote-control interface, the operator can accurately complete the tilting and swing test by entering simple values.
- The operation interface is mainly based on the real-time display of data curve, it also can display the test parameters, system status, and test progress.
- It can realize the functions of sine signal, self-closed loop adjustment, various function control and alarm prompt.
- The functions of roll, pitch, head-roll and tilt tests can be performed on the same platform.

TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD 60-100	KRD 60-300	KRD 60-500	KRD 60-1000	KRD 60-1500	KRD 60-2000	KRD 60-3000	KRD 60-5000	KRD 60-8000	KRD 60-10000
Max. Load (kg)		100	300	500	1000	1500	2000	3000	5000	8000	10000
Height of Specimen COG (mm)		300		500			700			900	
Yawing	Angle	0 ~ ±10°									
	Cycle	3s ~ 7s									
Rolling	Angle	0 ~ ±45°									
	Cycle	3s ~ 30s									
Pitching	Angle	0 ~ ±30°									
	Cycle	4s ~ 30s									
Rolling Tilting Angle		0 ~ ±45°									
Pitching Tilting Angle		0 ~ ±30°									
Control Mode		Computer control and measurement									
Table Size (mm)		800×800	1000×1000	1500×1200	1600×1300		1700×1500	1800×1600	3200×2100	3500×2800	4000×3000
Power		3-phase AC380V±10% 20kVA	3-phase AC380V±10% 22kVA		3-phase AC380V±10% 37kVA	3-phase AC380V±10% 45kVA	3-phase AC380V±10% 55kVA	3-phase AC380V±10% 70kVA	3-phase AC380V±10% 90kVA	3-phase AC380V±10% 110kVA	3-phase AC380V±10% 150kVA
Working Environment		Temperature range: 0 ~ 40℃, Humidity ≤80% (non-condensing)									
Installation Condition		According to the foundation drawings provided by the manufacturer									
Standards		IEC60068 – 2									

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD61 6-DOF TEST SYSTEM

KRD61 series 6-DOF test system is a closed-loop servo simulation platform consisting of six servo actuators and six sets of dedicated hinges connected at the top and bottom platforms respectively. By virtue of the telescopic movement of the six actuators, the upper platform moves in six degrees of freedom (X, Y, Z, α, β, γ), so various space motion attitudes can be simulated.

It is widely applied as testing or training simulators in the field of aircraft, vessel, helicopters taking off and landing, automotive, train, earthquake, motion movies, entertainment equipment and other fields. It can even be used for docking of space spacecraft and for refueling of aerial tankers. In the processing industry, it can be made into six-axis linkage machine tools, smart robots, etc.

- It can realize posture simulation, sine wave simulation, single-DOF motion, and multiple-DOF composite motion.
- It can realize road spectrum filtering, road spectrum, wave spectrum, and flight spectrum replication.
- Provide third-party communication interface through TCP / IP protocol.
- Provide internal and external data output control interfaces.

TECHNICAL SPECIFICATIONS

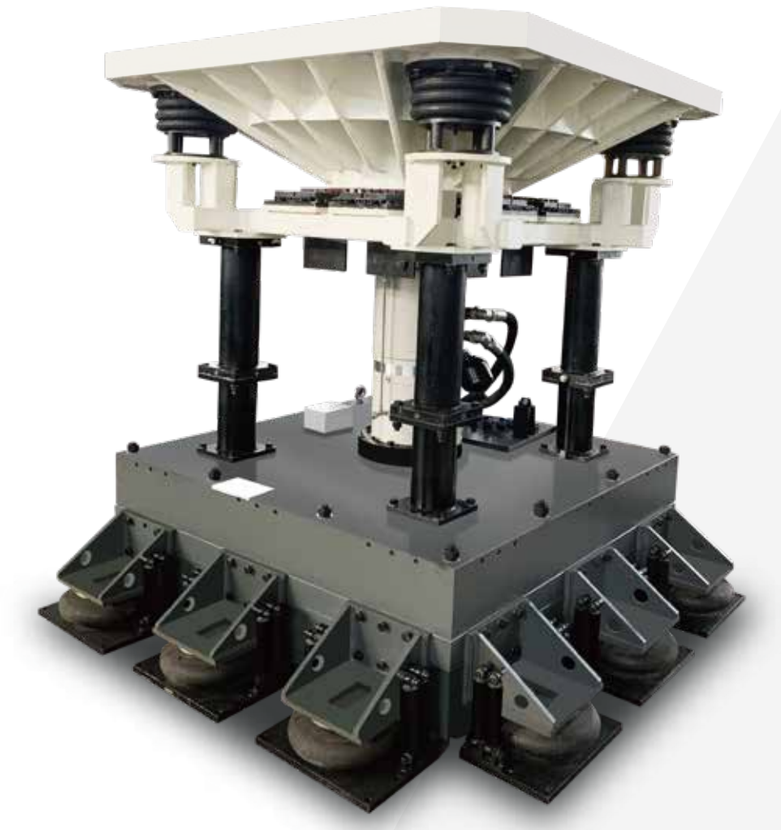
Parameters \ Model	KRD 61-100	KRD 61-300	KRD 61-500	KRD 61-1000	KRD 61-2000	KRD 61-5000	KRD 61-10T
Max. Load (kg)	100	300	500	1000	2000	5000	10000
Height of Specimen COG (mm)	500 ~ 1000 (customized by product)						
Table Dimension (mm)	Customized by testing conditions						
Pitch	±10° /±20° /±35° (customized)						
Roll	±10° /±20° /±35° /±45° /±60° (customized)						
Yaw	±10° /±20° /±35° (customized)						
Pitching Displacement (mm)	±50 / ±80 / ±100 / ±200 / ±300 / ±400 / ±500						
Rolling Displacement (mm)	±50 / ±80 / ±100 / ±200 / ±300 / ±400 / ±500						
Heaving (mm)	±50 / ±80 / ±100 / ±200 / ±300 / ±400 / ±500						
Standards	AC156 ISO 12405 ISO 13849-1 ISO 13090-1 ISO 2631-1						
Power Supply	3-phase AC380V±10%, 50Hz						
Working Environment	Temperature range 0 ~ 40°C, Humidity ≤80% (non-condensing)						
Installation Condition	According to the foundation drawings provided by the manufacturer						

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD70

HYDRAULIC VIBRATION SHAKER

KRD70 series hydraulic vibration shaker converts the energy of high-pressure liquid into the power of the reciprocating motion of the cylinder through the electro-hydraulic servo valve. Especially suitable for vibration tests requiring low frequency and high force. It can realize sine, random, multi-point excitation and shock test (sine, random, sine on random, random on random, or resonant search & dwell). It's applied for reproducing the vibrations of transportation vehicles, bulk packaging products, machinery, electrical and electronic products in the actual environment, thereby optimizing the product structure and saving costs.



TECHNICAL SPECIFICATIONS

Parameters \ Model		KRD 70-5K	KRD 70-1T	KRD 70-2T	KRD 70-3T	KRD 70-4T	KRD 70-5T	KRD 70-10T	KRD 70-20T	KRD 70-30T	KRD 70-40T	KRD 70-50T
Max. Sine Force (KN)		5	10	20	30	40	50	100	200	300	400	500
Frequency Range (Hz)	Sine	0.1 ~ 200			0.1 ~ 150		0.1 ~ 130		0.1 ~ 100		0.1 ~ 80	
	Random	0～300				0～200			0～150			
Max. Load (kg)		100	200	400	600	800	1000	1500	3500	5000	7000	8000
Max. Displacement (P-P) (mm)		100										
Max. Velocity (m/s)		0.6										
Table Size (mm)		600×600	800×800	1000×1000	1200×1200		1500×1500		1800×1800	2000×2000	2500×2500	3000×3000
Power Supply		3-phase AC380V±10% 50Hz										
Weight		2500	3000	3800	5000	6800	9500	9500	16000	21000	26000	31000
Working Environment		Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)										
Installation Condtion		Special foundation, optional free foundation										
Vibration Direction		Vertical / Horizontal										
Vibration Mode		Sine, random, road spectrum simulation										
Control Mode		Computer control and measurement										
Standards		MIL-STD-810 IEC60068-2 ASTMD4728										

Note: 1. The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.
2. Force, displacement amplitude, table size and working frequency can be customized.

- To achieve sine vibration, random vibration, multi-point excitation, and shock tests;
- It can be used to simulate seismic excitation and ammunition loading with low frequency and high force features.
- The high-strength cast aluminum or cast magnesium table ensures uniform and consistent vibration, high reproducibility, and avoids deformation of the table.

KRD100 INCLINE IMPACT TESTER

KRD100 series incline impact tester simulates the ability of product packaging to resist shock damage in the actual environment, such as handling, stacking of shelves, sliding of motors, loading and unloading of locomotives, product transportation, etc. This machine can also be used as a common test equipment for scientific research institutions, colleges and universities, packaging technology test centers, packaging materials manufacturing plants, and foreign trade, transportation and other departments to conduct incline impact test.

- Flexible low-damping tackle, high repetition accuracy, to achieve the required speed change value.
- High-strength and low-friction profile guide rails are beneficial to the accurate free sliding of the block.
- For heavy-duty test products, the horizontal rotation mechanism of the composite pulley table can be added to facilitate the user to install the test pieces.
- Hard wooden or iron sliding table, effectively protect the surface of the test piece.
- Complete control and measurement system, simple and convenient operation, integrated control and measurement.
- Unique lifting and release methods, with obvious advancement and reliability.
- During installation, the customer only needs to fix the machine on the ground, without other complicated operations or installation.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD100-100	KRD100-200	KRD100-300	KRD100-500	KRD100-1000	KRD100-2000	KRD100-3000
Load (kg)	100	200	300	500	1000	2000	3000
Working Table Size (mm)	1100×1100		1300×1300		1800×1800	2000×2000	2200×2200
Shock Panel Size (mm)	1600×2000		2100×2000		2000×2200	2400×2400	2600×2600
Incline Angle	10°±1°						
Shock Velocity Error	≤±5%						
Shock Velocity Range (m/s)	1.2 ~ 3.87				0.59 ~ 2.35		
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)						
Power	3-phase AC380V±10% 50Hz						
Installation Condition	Special foundation or embedded chemical anchor bolts or expansion bolts on the leveled concrete floor						
Standards	ISO2248 ISTA						

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD101

PACKAGING COMPRESSION TESTER

KRD101 series packaging compression tester is designed to evaluate the compressive strength of packaging in order to prevent the product from deforming or being damaged during handling, stacking, storage, and transportation due to insufficient packaging strength. This machine is one of the main testing equipment for corrugated packaging performance and comprehensive indicators, and is an ideal testing equipment for papermaking, packaging, commodity inspection, scientific research and other departments.

- Conform to standards ISO2872 & ISO2874
- Based on the stable Windows OS and support automatic remote-control interface, the operator can accurately complete the compression test by entering simple values.
- The operation interface is mainly based on the real-time display of data curve, it also can display the test parameters, system status, and test progress.
- High-precision AD conversion, preamplifier, data processing and automatic test result output, digital control to ensure test accuracy and stable performance.
- The strength test, fixed value test and stacking test can be realized on the same platform.

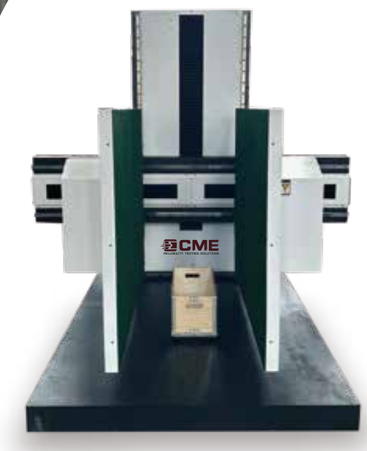
TECHNICAL SPECIFICATIONS

Measuring Range	0.2 ~ 100kN (can be customized)
Accuracy	2%
Platen Area	1200×1200mm² (extension plate is optional)
Working Stroke	0 ~ 1500mm (can be customized)
Pressing Speed	10mm / min (can be set arbitrarily)
Return Speed	0 ~ 120mm / min (can be set arbitrarily)
Foundation Requirements	Smooth cement floor
Standards	ISO2872 & ISO2874
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)
Power	3-phase AC380V±10% 50Hz

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.

KRD102

CLAMPING FORCE TESTER



KRD102 series clamping force tester is an indispensable test method for improving products into high-quality fields. It is suitable for research, development, quality control and manufacturing of electronics, electromechanical, optoelectronic, automotive, toy, packaging and other industries. It can simulate the situation that the goods in the container are clamped when they are transported from the container to the warehouse. Whether the goods are damaged due to the clamping, so as to evaluate the anti- clamping ability of the packaging.

The clamping force tester is a commonly used testing equipment for strength testing of scientific research institutions, colleges and universities, packaging technology testing centers, packaging material manufacturers, and foreign trade and transportation departments.

TECHNICAL SPECIFICATIONS

Parameters \ Model	KRD102-1	KRD102-2
Clamping Capacity (kg)	20 ~ 1000	20 ~ 2000
Clamping Plate Size (mm)	1000×1000	1200×1200
The Distance Between Plates (mm)	400 ~ 1000	400 ~ 1200
Up/Down Height (mm)	0 ~ 300	0 ~ 300
Overall Dimension (mm)	1200×700×900	1200×700×900
Table Weight (kg)	1300	1500
Measurement and Control System	PLC / PC controlled (optional)	
Requirement for Foundation	Flat cement floor	
Power Supply	3-phase AC380V±10% 50Hz	
Working Environment	Temperature range 0 ~ 40℃, Humidity ≤80% (non-condensing)	
Standards	ASTMD6055, American SEARS enterprise	
Remarks	The indicator parameters can be customized by your requirements.	

Note: The parameters in the table are for reference only, and the parameters agreed upon by the supplier and the buyer shall prevail.