

Technical Specifications

KRD13 Series High Acceleration
Shock Test System



KRD13 series high acceleration shock test system is specially designed to meet the requirements of military industry and home appliances. 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.

For the classic drop test, it's equipped with the corresponding shock amplifier to complete drop test.

- **Windows-based stable control system**, full-automatic remote-control interface
- **Pneumatic cylinder driving** with advantages of large driving force, short accelerating stroke, low cost and pollution free.
- **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 most reliable double-brake system**: effectively avoids secondary rebound collisions, more securely positioning the table, and more reliably guarantees the safety of the operator.
- **Easy installation**: the device comes with a base, due to short driving stroke of the pneumatic cylinder, the footprint is small.

Technical Specifications

Model		KRD13 - 50	KRD13 - 100	KRD13 - 200	KRD13 - 500	KRD13 - 800	KRD13 - 1000
Parameters							
Rated Load (kg)		50	100	200	500	800	1000
Table size (mm)		300×300	500×500	800×600	800×800	1000×800	1000×1000
Peak Acc. (G)	Half-Sine	10 ~ 850	10 ~ 200	10 ~ 300	10 ~ 200		
	Post-Peak Sawtooth	10 ~ 200	10 ~ 700	10 ~ 100	10 ~ 60		
	Trapezoid	\	15 ~ 100		15 ~ 60		
Pulse Duration (ms)	Half-Sine	0.8 ~ 40	3 ~ 18	1.5 ~ 40	2 ~ 40	3 ~ 40	
	Post-Peak Sawtooth	3 ~ 18	1 ~ 40	3 ~ 18	6 ~ 18		
	Trapezoid	6 ~ 12					
Bump Waveform		Half Sine Waveform					
Shock Peak Acceleration (G)		5 ~ 150					
Shock Pulse Duration(ms)		3 ~ 30					
Overall Dimension (mm)		1000×1000 ×1200	1100×1100 ×1500	1100×1100 ×1500	1100×1100 ×1500	1400×1400 ×1600	1500×1500 ×1600
Weight (kg)		1000	1800	2500	2800	3800	4000
Max. Frequency Times (Times/Min)		100	80		60	50	40
Power		AC220V ±10%, 50Hz, 2kVA					

Power requirements for The Air Compressor	AC220V±10%, 50Hz, 3kVA or AC380V±10%, 50Hz, 5kVA
Air Source Conditions	Air source output pressure is no greater than 1.0Mpa. If there is no air source in the lab, air compressor needs to be configured; if there is air source in the lab, and there is a high requirement for shock frequency times, a corresponding air tank needs to be configured.
Working Environment	Temperature range 0 ~ 40°C; Humidity ≤ 90% (25°C), non-condense
Standards	MIL-STD-810F IEC68-2-27