

CENTRIFUGE (CONSTANT ACCELERATION TESTER)



CMT series centrifugal constant acceleration tester is 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.

CMT series centrifugal constant acceleration testers include two types: one is the CMT1 box-type and the other is CMT2 arm-type. The box-type has a small diameter, high rotational speed, large centrifugal acceleration, and is mostly used for small electronic devices. It can conduct tests on 2-20 workstations simultaneously. The arm-type has a strong load-bearing capacity and can use different arm lengths and speeds to produce a constant outward acceleration at the outermost end of the arm according to the needs. The test machines are all driven by electric motors and the rotation speed can be adjusted by frequency modulation to reach the target acceleration.

CMT1 box-type centrifuge can provide with acceleration of 40,000g, 80,000g, and 120,000g.

CMT2 arm-type and can test a load of over 1,000kg, and electrical connection device (including video and microwave signals) can be configured according to requirements.

System Model	CMT1-5	CMT1-10	CMT1-05	CMT2-100	CMT2-200	CMT2-500
Max. Payload	5	10	0.5	100	200	500
Number of Installation Positions	4	2	10	2	2	2
Acceleration(g)	3-200	5-100	10-30,000	3-250	2-100	2-50
Max. Height for Specimen (mm)	200	300	100	500×500×400 (L×W×H)	700×700×700 (L×W×H)	1,000×1,000×1,000 (L×W×H)
Installation Radius (mm)	200	750	100	1,500	2,500	3,000
Startup Time (min)	≤4	≤3	≤4	≤3	≤5	≤5
Shutdown Time (min)	≤4	≤3	≤4	≤3	≤5	≤5
Continuous Running Time (min)	60	60	30	60	60	30
Total System Power (kVA)	1.5	7.5	0.9	55	100	120
Overall Size (mm)						
Length	920	1,955	800	φ4,500	φ7,500	φ8,500
Width	910	470	800			
Height	1,245	995	830			
Standard	MIL-STD-810F IEC68-2-7 MIL-STD-202 MIL-STD-750 MIL-STD-883					