

Container Compression Testing Machine

CPT Series 10kN-50kN

Introduction

CPT Series Packaging Container Compression Testing Machine is designed for performing compression test of packaging carton, box, barrel or other container. With high accuracy and reliability that can keep constant loading on specimen up to 30 hours with load fluctuation within $\pm 0.5\%$ of setting. CPT Series offers three different models with capacities of 10kN, 20kN and 50kN which can satisfy completely the testing requirements of materials of carton or packaging industries according to international reference test standards of ISO, BS, ASTM and others



Fig1 CPT Series Packaging Container Compression Testing Machine

Common features:

CPT series packaging container compression testing machine apply extremely rigid guide profile with concentric guide axis. The play-free guide and the ball lead screw ensure low wear and operating comfortable in compression of different material

packaging containers. The extremely wide size and high rigidity compression platen can be customized for special use according to customers' real needs. Long time constant loading up to 30 hours with fluctuation within $\pm 0.5\%$ of setting ensures testing under super

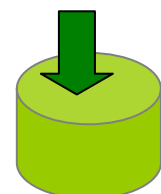
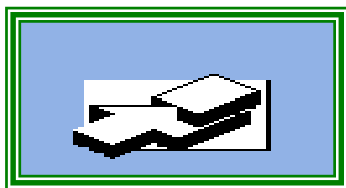
simulation condition. The high precise digital technology servo motor drive system features a high control range. Super robust, industrial drives are used with a negligible thermal development (thus increasing the lifespan of the system), making them highly dynamic through position, velocity, and acceleration control.

These drives are extremely low noise even at nominal speed at rapid crosshead return.

The operation with standard PCs and the test software PowerTest® offers you the comfortable operation, efficient data analysis and statistics, and preferment networking functionality.

Key features:

- DCS-300 full digital closed loop control system based on the advanced DSP platform
- The high precise digital technology servo motor drive system features a high control range
- Multi-communication technology via USB
- Ideal compression platen size can be customized for special use according to real needs.
- Operation with standard PC and professional testing software PowerTest for the most comfortable operation, analysis and statistical data processing
- Automatic transducer detection and intelligent help for all dangerous and error situations
- High investment security through individual configuration possibilities
- Compatibility concept for continuous component expansion
- Continuous further development of system test machine
- High accuracy: Measurement accuracy of testing speed, load, crosshead displacement can meet or surpass $\pm 0.5\%$ of reading
- High sampling rate: The sampling rate 50Hz, reaching advanced international level
- Allow testing speed range from 0.001-500mm/min and maximum crosshead travel reach 500mm
- High load resolution: Better than 1/300000, no step, and unchanged in full range loading
- High displacement resolution reaches 0.00003mm
- Multi-cycle control modes: Control system is capable in load cycle, displacement cycle, extensometer cycle or their combination.
- High security: The system can inspect and protect automatically once overload, over currency; Position limiter; Emergency stop
- Comply with different standards, such as ASTM, BS, EN, JIS, ISO, IEC...



Technique Specifications:

Model	CPT5504	CPT4104, CPT4204
Capacity	50kN	10kN, 20kN
Accuracy	Grade 0.5	Grade 0.5
Measurement range	0.4%-100% of load cell	0.4%-100% of load cell
Load indicating accuracy	Within $\pm 1\%$ of setting	Within $\pm 1\%$ of setting
Load resolution	1/300000	
Compression platen size	1300mm	700mm
Effective testing height	1500mm	1100mm
Testing speed range	0.05—500mm/min	0.05—225mm/min
Speed indicating accuracy	Within 0.5% of indicating	
Displacement indicating accuracy	Within 0.5% of indicating	
Dimension of load Frame	2130X1300X2230mm	1490X800X1840mm
Power	220V; 750W	220V; 400W
Weight	1500kg	750kg

Specifications:

Load measurement accuracy: +/- 1% of indicated load from 0.4% to 100% capacity

Load measurement resolution: 1/300000 of capacity, no steps in full loading range and keeping unchanged

Position measurement accuracy: +/- 0.5% of reading

Strain measurement accuracy: +/- 0.5% of indicated load from 0.4% to 100% capacity FS

Displacement speed accuracy: +/-1% of setting when speed less than 0.01mm/min, +/-0.2% of setting when speed (equip to)/more than 0.01mm/min

Operating temperature range: 0 to 38 degrees C

Storage temperature range: -10 to 45 degrees C

Humidity range: 10% to 90% non-condensing, web bulb method

Power: standard optional voltages 220/240VAC, 50-60 Hz, ; power must be free of spikes and surges exceeding 10% of the nominal voltage(CMT5000 needs voltage in 380V +/-10%)

Notes: 1. Load weighing system meets or exceeds the requirements of the following standards: ASTM E4, EN10002-2, BS 1610, DIN 51221, ISO 7500-1. SANS recommends that systems are verified at installation in accordance with ASTM E4 and ISO 75001. 2. Strain measurement system meets or exceeds the requirements of the following standards: ASTM E83, EN 10002-4, BS 3846 and ISO 9513.

