

CDT Series Electromechanical Compression Testing Machine (50kN-300kN)

Introduction:

CDT Series (Fig.1) Electromechanical Compression Testing Machine mainly performs compression tests of cement, concrete and mortar and also the flex tests by equipping with special fixture according to relative international standards such as ISO, ASTM and so on. CDT Series provides four different models which applying rigid and robust columns and equipping with load cell capacity of 50kN, 100kN, 200kN and 300kN. The relative model: CDT504, CDT105, CDT205 and CDT305.

Fig1 CDT Series Testing Machine



Common Features:

The CDT Series provide service to the industrial field of construction and architecture, as precise as the CMT series electromechanical universal testing machines, it adopts servomotor drive system and combine SANS patent testing software and control system to control the full testing processing. Standard PC equipped with SANS PowerTest testing software assure the data and curve of tests can be displayed on the screen, and the tests result also can be printed via the printer

synchronously.

The model CDT series have a rigid and robust two-column load frame to bear the load capacity from 50kN, 100kN, 200kN and 300kN.



Fig2. Operation control panel

Suitable operation height and single testing area is convenient to insert and take out the specimens, the manual

control operation panel (Fig 2.) is fixed on the column is capable of control testing, the trash callback slot mounted in rear of the testing bed to save your valuable time of disposal the dirty fragment of testing

Fig 3. Flex fixtures instead of compression platens are conducting bending break test of bricks on CDT305

Key Features:

- Complete automatic testing processing control by microcomputer.
- Apply ball lead screw ensure high precise crosshead guidance
- Advanced servomotor drive system ensure high precision and low noise
- Closed loop servo control function.
- Constant velocity and equivalent loading.
- A high standard of comfort and user ergonomics is created in synergy with the test software PowerTest®
- High load weighing resolution reaches 1/300000 of capacity in full range, no

PowerTest Software:

Building on our long history of providing solutions to an enormous variety of different testing problems, SANS offers a comprehensive range of software products, each design in the hope of making testing simple, precise and efficient. Specific and focused application software products have been developed in close cooperation with our customers around the world.

samples. The compression platens can be replaced of the flex fixture to conduct bending test (Fig 3.)



steps and no change.

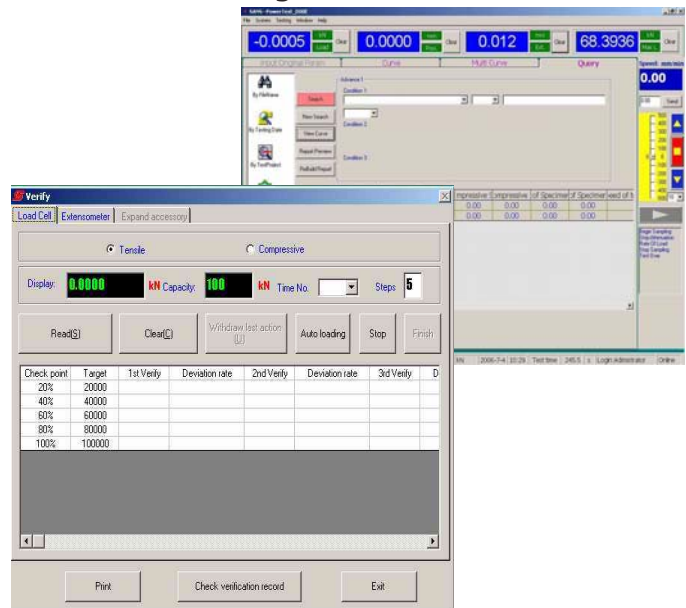
- Real time indicating of load, deformation, speed and testing graph.
- Powerful PowerTest software process and analysis the testing data, the testing results stored and recalled automatically, the curve of tests can be reviewed at the any points with indicating their character.
- Superior automatic protection of over load, over position, and over velocity.
- CE and ISO9001-2000 Conform design.

There are several valuable features that are common to all. Perhaps the most important is the ability to further customize the testing parameters that are used to collect and document testing data, as well as control the testing machine. Specifically, our range of application software is for data acquisition, data analysis, and closed loop control of SANS testing machines that have a compatible

servo system or four-quadrant drive. All versions of our focused application software are rich with standard features

- Use of modern databases.
- Generation of user customized reports.
- Standard SPC programs for X-bar, R, and frequency distributions/histograms.
- Ability to recall, replot, and rescale curves.
- Recall of data that spans different test modules.
- User-configurable machine parameter and control setting

that improve productivity and enable you to build, access, and use a powerful material testing database



Technical Specifications:

Model	CDT504	CDT105	CDT205	CDT305
Maximum load capacity (kN)	50	100	200	300
Accuracy level	Grade1			
Load measurement range	0.4%-100%			
Load measurement accuracy	≤±1% of indicating			
Column	2			
Distance between columns (mm)	300			
Load resolution	1/300000			
Maximum speed of loading	0.02-5%FS/S			
Accuracy of loading speed	±1%			
Distance between compression platens (mm)	220			
Diameter of upper compression platen (mm)	110			
Diameter of lower compression platen (mm)	130			
Maximum stroke of lower compression platen (mm)	100			
Maximum speed of lower compression platen (mm/min)	50			
Dimension (mm)	1230x700x1300			
Weight (kg)	1000			
Power (kW)	1.5			

