

Computer Controlled Electronic Universal Testing Machine

Model: WDT Series



1, General introduction

WDT Series Bench top Computer Control Electronic Universal Testing Machine made by UNITEDTEST range from 10KN to 600KN load capacity to perform tension, compression, flexure/bending, shearing, peeling etc., test for metal and nonmetal specimens.

This Series Dual Column testing systems provide simplicity, performance, and affordability for quality control (QC) labs and production testing.

Load weighing system meets or exceeds the requirements of the following standards: ASTM E4, EN10002-2, BS 1610, DIN 51221, ISO 7500-1.

2, Application

Widely used for industrial application, factory quality control, science and research institute, QC & QA college student training, education institute, testing and inspection center, laboratories, construction company, aerospace, mechanical production, electric appliance fields.

Comply with different standards such as ASTM D638, ASTM D695, ASTM D790, ASTM D412, 624, ASTM D882, ISO 527, ISO 37, ISO 604, ISO 178 and other equivalent BS, ASTM, JIS standard.

3, Key Features

Load frame and driven type

1), Frame are proof loaded to 150% of capacity, with concentric arrangement of the drive lead screw and crosshead guide which assure high accuracy and strong reliability;



Leading screw

AC servo motor

- 2), Adopt high accuracy Chinese famous brand load cell and servo motor.
- 3), Adopt Circular Arc Profile Synchronous Belt Transmission, eliminate dual direction clearance, prolongs the life of synchronous belt;
- 4), Multiple load cell in one machine available.

Grip and test fixture

- 1), Manual, hydraulic, pneumatic tensile test fixture available;
- 2), Removable grip-jaws can be changed rapidly to meet variable wider applications in tension test.
- 3), Versatile test fixture like peeling, shear, bending, flexure, tear, burst, puncture, compression test for kinds of material;

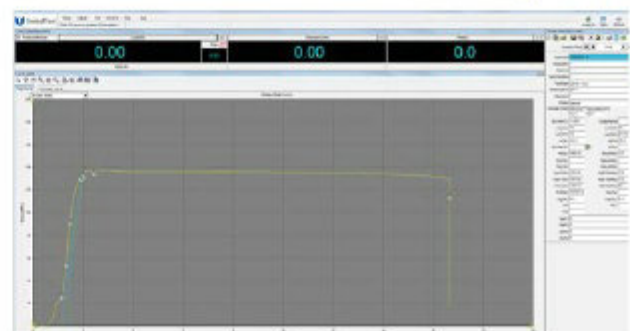
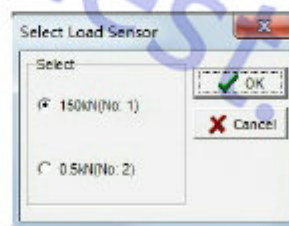


Security function

- 1), Sensor of position limitation switch;
- 2), Emergency stop switch;
- 3), Hardware driving system overload protection, over voltage, current protection;
- 4), Software over load protection.

Control system, Software

- 1), Based on full digital STC8800 measuring and control card; Data collection system use 4 channel of high accuracy 24 digit A/D converter;
- 2), Real time load, deformation, crosshead displacement, test process four kind close loop control;
- 3), Resolution can upto 1/500000, full range without step;
- 4), Level authorization management function: to improve software and data security, can set different password to realize several class authorization management. Different user with different right to operate the machine, avoiding unexpected mistake because human error.
- 5), Load~Time, Load~displacement, Displacement~time etc. curve smoothly switch, display test data, save, analysis and print.



4, Main technical specification

Load capacity	10KN/20KN
Frame proof load capacity	150% of rate capacity
Multiple load cell in one machine function	YES
Load Accuracy	Class 1 according ISO7500-1
Load cell overload capacity	120% of rate capacity
Load measuring resolution	1/300000 FS, stepless
Position / displacement resolution	0.001mm
Crosshead travel	1450mm
Tensile test space	900mm
Compression test space	1000mm
Effective testing width (Clearance between columns)	450mm
Standard tensile test fixture	Opposite Corrugated clamping tension
Wedge tensile fixture Flat specimen range	0-14mm
Wedge tensile fixture Flat specimen range	Φ4-Φ14mm
Compression platen diameter	Φ100mm
Testing speed range	0.001 mm/min ~ 500 mm/min, stepless, adjustable arbitrarily
Weight	280Kg
Dimensions	785*560*1800mm
Standard Power	220/110V, 50/60HZ, 1 phase, 0.75Kw
Analysis software	SmartTest English version
Working system	MS Win7 / Win10
Frame structure	Standard: Single test space

5, Main accessories

High Stiffness Frame	1 set
Servo driving system:	1 set
Servo motor:	1 set
Loadcell:	1 set
Decelerator and deceleration system	1 set
Leading screw:	1 set
Tensile test fixture	1 set
Compression test fixture(Φ100mm)	1 set
Professional testing software(SmartTest, English version)	1 set
Computer	1 set
Printer	1 set
Documents (Manual, packing list, certificate)	