

## *Computer Controlled Electronic Universal Testing Machine*

### **Model: WDW-Y/E Series**



#### **1, General introduction**

WDW Series Computer Control Electronic Universal Testing Machine made by UNITEDTEST range from 100N to 600KN load capacity with various models like single columns, table type, door frame type etc., is used to perform tension, compression, flexure/bending, shearing, peeling etc., test for metal and nonmetal specimens.

Single Column Tabletop universal testing systems can be used over a range of force applications up to 5 kN (500 kg). A variety of load cells are available to provide accurate measurements for applications ranging from micron-size fibers to those utilizing the full capacity of the load frame. Additionally, a full range of grips, fixtures, and strain measurement devices are also available.

#### **2, Application**

Applications solutions include medical devices, biomaterials, textiles, elastomers, food, small components, wire, paper, plastic, film, fibers and threads, adhesives and many more.

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 200% 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 Japan Panasonic/FUJI AC servo motor and driving system, ensure transmission and moment of force stable;
- 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;

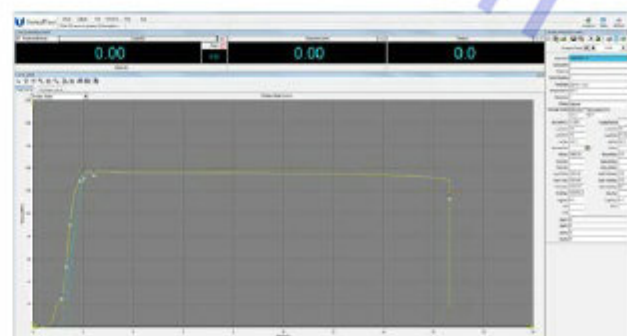


#### Security function

- 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, corsshead displacement, test precess four kind close loop control;
- 3), Resolution can upto 1/500000, full range without step;
- 4), Level authorization management function: to improve sftware 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	100N, 200N, 500N, 1Kn, 2KN, 5KN
Frame proof load capacity	150% of rate capacity
Multiple load cell in one machine function	YES
Load Accuracy	Class 1/0.5 according ISO7500-1
Load cell overload capacity	150% of rate capacity
Load measuring resolution	1/500000 FS, stepless
Position / displacement resolution	0.001mm
Crosshead travel	1150mm
Tensile test space	800mm
Compression test space	900mm
Standard tensile test fixture	Corrugated Opposite clamping
Compression platen diameter	Φ 100mm
Testing speed range	0.001 mm/min ~ 500 mm/min, stepless, adjustable arbitrarily
Weight	110kg
Standard Power	220/110V, 50/60HZ, 1 phase
Dimensions	520×410×1500mm
Analysis software	SmartTest English version
Working system	MS Win7 / Win10