

## *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.

Matched with UNITEDTEST design and produced various test fixture, like peel, flexure, puncture, tear, pneumatic grip, belt tension etc., this UTM can be used to almost all materials include but not limited to steel rod, rubber, steel wire, plastic, seat belt, textile, wood, panel etc., mechanical performance inspection.

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 300% of capacity, with concentric arrangement of the drive lead screw and crosshead guide which assure high accuracy and strong reliability;



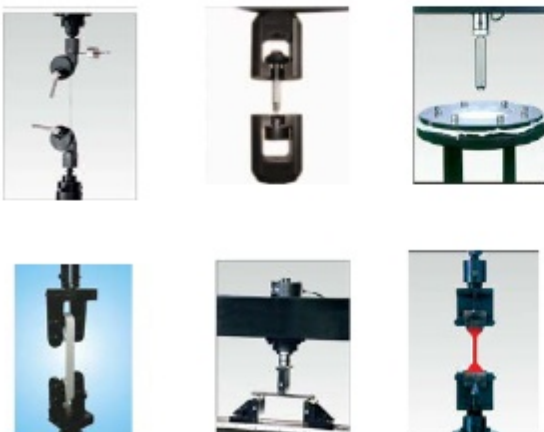
Leading screw

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**

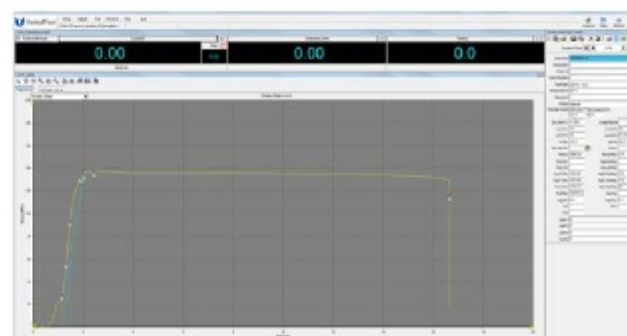
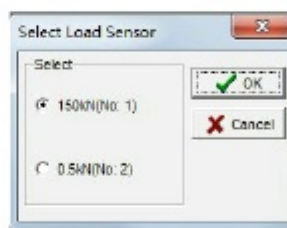
- 1), Manual, hydraulic, pneumatic tensile test fixture available;
- 2), Removable grip-jaws can be changed rapidly to meet variable wider applications in tension test.
- 3), Versatile test fixture like peeling, shear, bending, flexure, tear, burst, puncture, compression test for kinds of material;


**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	<b>10KN/20KN/30KN/50KN</b>
Frame proof load capacity	<b>300% of rate capacity</b>
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	1200mm
Tensile test space	700mm
Compression test space	800mm
Effective testing width (Clearance between columns)	500mm
Standard tensile test fixture	Manual wedge type
Wedge tensile fixture Flat specimen range	0-20mm
Wedge tensile fixture Flat specimen range	Φ4-Φ20mm
Compression platen diameter	Φ100mm
Testing speed range	0.001 mm/min ~ 500 mm/min, stepless, adjustable arbitrarily <b>(Optional max. 1000mm/min)</b>
Weight	450Kg~600kg
Standard Power	220/110V, 50/60HZ, 1 phase
Analysis software	SmartTest English version
Working system	MS Win7 / Win10
Frame structure	Standard: Dual test space Optional: Single test space

**5, Main accessories**

High Stiffness Frame	1 set
Servo driving system:	1 set
Servo motor:	
Loadcell:	1 set
Decelerator and deceleration system	1 set
Leading screw:	1 set
Wedge 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)	