

Computer Control Electronic Universal Testing Machine

Universal Testing Machine

Load Cell

- High Precision force value sensor
- 0.4% to 100% test range of full capacity
- High overloading range protection
- Linearity within 0.05%

Rotary Encoder

- Optical-electric Pulse digital output
- Test Movement of Machine loading crosshead
- Resolution of reading 0.01mm
- Used as deformation value for some material tesseed

USB Remote

- Connect to the PC by USB
- With full function button for whole test procedures.
- Loading Speed indicating in Panel
- Can be put any location by Magnet Chuck base.

Software

- Used in all popular Windows OS.
- Multi-language Supported by order
- Excel test report
- Microsoft Access Data base supported
- Multi-curve supported for test data.
- Rp0.2, Rt0.5 calculated automatically
- User programmable and parameter settable for all different test standrad.
- Calibrating Automatically.

Limited Switch

- Electronic upper and lower crosshead switch
- Protect operator and equipment
- Software indicating when triggered
- Easily set the protection position

Extensometer

- High precision for Deformation sensor
- 0.4% to 100% test range of full capacity
- 5,10,25,50,100,200,250mm Gauge length selectable
- 1%, 5%, 10%, 25%, 50% deformation range of gauge length
- Large Deformation extensometer optional part for Plastic, Rubber and leather.

Servo Motor

- AC servo motor drive ball screw loading
- Low noise
- Accurate loading speed and loading position

Emergency Switch

- Equipment stop action and software alarm when triggered

Control Card

- PCI or PCI-E Slot
- Double input channel of Resolution of 1/300000 A/D
- Two digital input channel.
- 4 pair digital bit input and 4 pair bit output
- Pulse out put to Servo Driver
- Load, Deformation, Displacement 3 close loop control

Model Defination U E 3 4 300

·U·

symbol	Testing
U	Universal
T	Tensile
C	Compression

·E·

symbol	Load drive
M	Manually
E	Motor
H	Hydraulic

·4·

symbol	Display or control
1	Mechanical indicate
2	Digital indicate
3	Computer indicate
4	Computer Servo

·3·

symbol	Machine type
1	Single Benchtop
2	Double Benchtop
3	Double Floor Stand

·300·

symbol	Load Capacity
kN	For Motor drive
ton	For Hydraulic type

Specification

Model	UE1401/02/05	UE2401/02/05/10/20	UE3430/3435/100	UE34200	UE34300
Maximum force(kN)	1/2/5	1/2/5/10/20	50/100	200	300
Machine type	Single	Double	Floor	Floor	Floor
Measuring range of force (kN)	0.4%--100%F.S				
Resolution of force	1/300000 of maximum force				
Accuracy of displacement measuring	±0.5%				
Resolution of displacement	0.1 μm				
Accuracy of deformation measuring	±0.5%				
Speed range of displacement control	0.01-500mm/min (Max 1000mm/min as special order)				
Speed range of force control	0.005-5% F.S / S				
Speed range of deformation control	0.005-5% F.S/S				
Range of constant displacement, force and deformation	0.5%-100% F.S				
Speed controlling accuracy	≅±1.0% of the set value				
Valid tension testing space(mm)	800	800	650	600	600
Compression testing space(mm)	900	900	900	1000	1000
Valid width between columns(mm)	/	400	600	580	600
Tension sample clamping (mm)	Flat grips	0~20	0~14	0~14	0~20
	Round grips	/	Ø4~14	Ø4~22	Ø9~26
Power supply	1P~220V, 1-3 kW, 50/60Hz		3P~380V/220V, 4-7.5 kW, 50/60Hz		
Working environment	Room temperature 10℃ ~40℃, relative humidity≤90%				
Over dimension without PC table (mm)	600×420×1800	830×550×1950	1050×800×2250	1150×870×2450	1250×900×2650
Weight(Kg)	300kg	600kg	1500kg	1800kg	2000kg

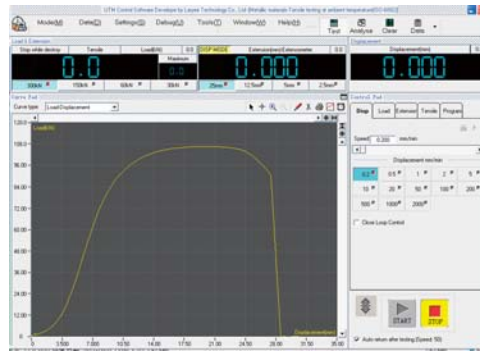


Control System

- ※ High accuracy Load cell, Encoder and optional extensometer to test the force, displacement and extension. Reading resolution can be 1/300000 of full range. Computer 3 close-loop control testing mode of load, displacement and extension.
- ※ Large Extension and Digital gauge input channel for special test of deformation.
- ※ Speed control from 0.01 to 500mm/min (special 1000mm/min) by servo motor.
- ※ PCI computer control card to get the test value and control the servo motor
- ※ Multi-languages supported, Data saves and transports to Microsoft Words, Excel.
- ※ Database function, allow customer define test method, real-time test point value, value result formula and test report format.
- ※ Multi sensor supported. Max 4 load cell , 4 strain gauge extensometer, 1 large deformation extensometer and 1 digital gauge can be defined.
- ※ Metric and British unit exchanging supported mm, N, KN, kg and inches, lbs and pound.
- ※ Calibration automatically and easily
- ※ Two grade of user administrate system for common operator and system administrator
- ※ Remote controller adjusts the machine crosshead before test and operate the test conveniently.
- ※ Support different version of Microsoft windows OS of WinXP, Vista, Windows 7 and etc.



Control Card



Software



USB Remote

Standard Accessories

Wedge Tension, Compression Plate, 3-Points bending accessories; Encoder installed; Load cell installed; Servo motor and controller built in; Extensometer; DSP PCI Control card; Installation tools; PC and Printer.

Optional Accessories List



Wedge Tension 1



Wedge Tension 2



Pneumatic Tension



Flat Tension



Film Tension



Opposite Peeling



Thread Tension 1



Thread Tension 2



Bolt Tension



Nail Withdraw



3-Points Bend



Shear



4-Points Bend



Compression Plate



Wood Shear



Wood Bending