

Computer Control Electronic Universal Testing Machine

Introduction

WDW Computer Control Electronic Universal Machines are suitable for tensile, compression, bending, shearing and all other special load test for metal and non-metal material such as steel, aluminum, copper, geotextile, plastic, rubber, thread, wood, alloy, PVC, spring, electrical wire and cable, composite, profiled bar, waterproof roll, etc. Adding relative optional accessories, it is easy to achieve the test of peeling, friction, tearing, puncture and hardness test. They are essential testing instruments for quality testing section, university and college, research institution and industrial and mining enterprise laboratory. The machine is calibrated as ASTM E4 and ISO 75001 international standard. By adding different grips it can do the test of ISO 6892, ISO 7438 ISO 527, ISO 8295, ISO 37, ISO 178, ASTM E8, ASTM A370, ASTM D412, ASTM C1161, ASTM D882, ASTM D885, ASTM D918, ASTM D1876, ASTM D4632 and all the force and extension JIS, DIN, BSEN testing standards.

The machine equips with high precision servo motor control system, ball screw leading and high precision reducer or synchronous belt to add the load when testing. Stable structure of the machine frame makes the test and control in high accuracy.

Control system is full closed loop measuring and control system. It adequately absorbs advanced functional characteristics and integrates the latest international professionally developed measuring and control system PCI control card. Control software can automatically figure out routine data, such as tensile strength, yield strength, modulus of elasticity, extend rate after rupture, non-proportional extend strength RP0.2, etc. It can adopt many kinds of controlling modes, such as constant force, constant displacement, constant deformation, and real time display many testing curves of force-displacement, force-time, and stress-strain.

These curves automatically switch. Testing process control and data processing conform to the requirements of all kinds of test standard.



WDW-1,2,5



WDW-1,2,5,10,20

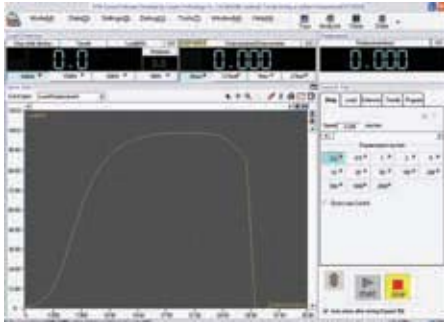


WDW-50,100,200,300

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Specification

Parameters		WDW-05,1,2	WDW-5	WDW-10	WDW-20	WDW-50	WDW-100	WDW-200	WDW-300
Maximum force		0.5, 1, 2KN	5KN	10KN	20KN	50KN	100KN	200KN	300KN
Accuracy		≤±0.5%							
Measuring range of force		0.4%~100%F.S							
Resolution of force		1/500000 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							
Speed range of constant displacement, force and deformation		0.5%-100% F.S/S							
Speed controlling accuracy		≡ ±1.0% of the set value							
Valid tension testing space(mm)		800	800	800	800	600	650	680	680
Compression testing space(mm)		700	700	700	700	600	650	680	680
Valid width of testing space(mm)		370	370	370	370	470	560	600	600
Tension Sample Clamping (mm)	Flat grips	0~14	0~14	0~14	0~14	0~14	0~14	0~20	0~20
	Round grips	4~14	4~14	4~14	4~14	4~22	4~22	9~26	9~26
Power supply		220/380V, 1-3 kW, 50/60Hz						220/380V, 5 kW, 50/60Hz	
Working environment		Room temperature 10℃~40℃, relative humidity≤90%							
Over Dimension without PC table (mm)		600×420×1500		740×500×1680		830×550×1950	1050×800×2250	1150×870×2450	1250×900×2650
Weight(Kg)		300kg		580kg		1100kg	1500kg	1800kg	2000kg



Software1



Remote



PCI DSP control card

- ✘ High accuracy Load cell, Encoder and optional extensometer to test the force, displacement and extension. Reading resolution can be 1/500000 of full range. Computer control 3 close-loop control testing machine by load, displacement and extension.
- ✘ Large Extension and Dial gauge digital 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 saved and support 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 7 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
- ✘ Control remote box to adjust the machine crosshead before test and operate the test conveniently.
- ✘ Support Different version of Microsoft windows OS of WinXP, Vista, Windows 7 and etc.

Standard Accessories

Tension, Compression, bending accessories; Cable, Encoder installed; Load cell installed; Servo motor built in; Extensometer; DSP PCI Control card; Flat Tension Grip; Compression Plates; Installation tool and Cables; PC and Printer by order.

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Optional Accessories List



Wedge Tension



Wedge Tension



Compression



3 Point Bend



Shearing



Oppsite Tension



Thread Tension



Pneumatic Tension



Tension



Nail Withdraw



Wood Shear



Wood Bending



Film Tension



Thread2



Flat Tension



4 Points Bend