Main application:

WDW Series is a new kind of electronic universal testing machine produced by TIME-Shijin Group, which adopts the most advanced and reliable load frame structure of ball screw electric mechanical universal testing machine of the world. The driving system adopts AC servo timing system and motor from Panasonic Co. Ltd. of Japan. The PC controlling system is able to realize the close-loop control of the parameters such as loading force, specimen deformation, and crosshead stroke etc. The system realizes the screen display, online diagram drawing, testing curve changing, fold curve collation and auto analysis of test results, creation of test report. Especially, the application of the control mode can be manual control or computer programming control which makes the cyclic tests become available.

By switching simply of different accessories, WDW series Universal testing machine can make tests on most of materials and components to suit your needs.

LOAD CELL
Overload protect High accuracy Force transducer

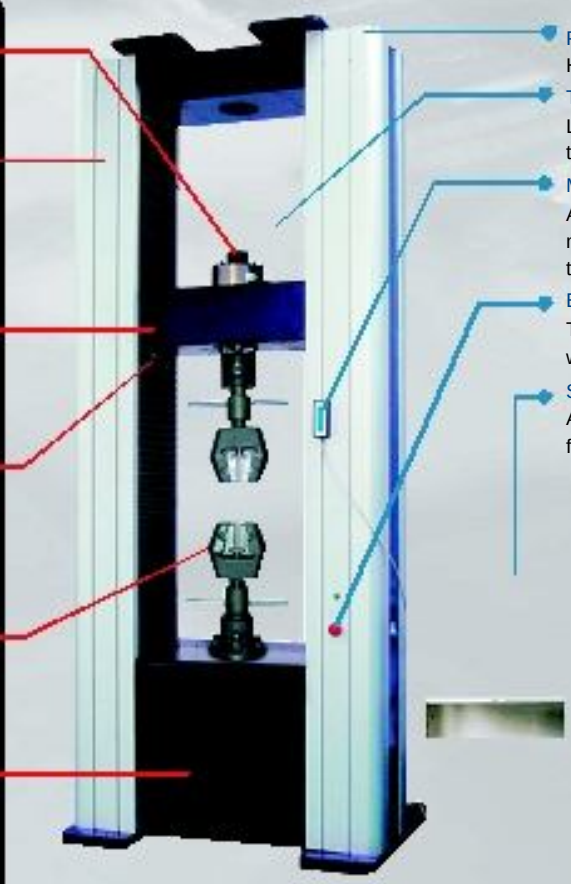
MACHINE COVER
Aluminum alloy cover and steamlined design; Optional color label on side of cover according to customized need.

CROSS HEAD & STRUCTURE
High intensity testing machine structure and crosshead, assure the accuracy during the tests.

LIMIT SWITCH
Cross head displacement restrict, Un-tangency photoelectric transducer
Safe and reliable to control

TEST ACCESSORY
Exchangeable testing accessory to satisfy different test needs. Easy and reliable to change

SERVO MOTOR & SYSTEM
Full digital AC servo and high accuracy servo motor, High efficiency, Low noise and stable load transmission



PHOTOELECTRIC ENCODER
High accuracy photoelectric coder

TESTING AREA
Large testing area, suitable for most of the test requirements.

MANUAL CONTROL
A separate control box is set to provide multi-controlling of crosshead up/down to suits your needs.

EMERGENCY STOP
To lock the equipment fast and reliably when emergency situation occurs.

SOFTWARE(refer to software part)
Analog instrument technology with friendly operation interface.

CONTROL CARD
(refer to software part)
Plug In PCI control card, suits all kinds of personal computer and main board. Full digital measure and control circuit provided with Load, displacement &Deformation different measuring channel. Close loop control by simply software Configuration.

Features:

Complete computer controlled: The whole measuring and controlling system adopts specific PC control card used for testing machines, realizing the data zero and plus adjustment, which has very high reliability.

Supporting multi-transducers

Realizing the database management of the test data which are stored according to the standard format; facilitating other software to analyze and transfer.

Perfect programming by auto program control, every control mode can smoothly shift to another one. Fulfilling the test requirement of all kinds of materials with every test standard home and abroad.

Control software has the auto-adjusting function of test hardness, which assures that the system works with every kind of specimen hardness.

Perfect graphic function realizing the arbitrarily magnifying, decreasing, equaling, adding, indicative display and print of all kinds of test curves, the test point searching as well as the simultaneous display and print of several kinds of test curves. Data processing supposes self-disposing and input disposing of graphic human computer interaction, which facilitates the check and contrast of the test result.

The user can self -define the output of the test report, which makes the report format have very high flexibility.

Modularization design facilitates the software upgrading, function spreading as well as the second development.

Standard Accessory:

Tension

Compression

Bending

Standard Accessory for WDW Series:

Tension grip jaws (Wedge action Grips)	1 set
Grips for round specimen	4pcs for each
Grips for flat specimen	4pcs for each
Compression test attachment	1 set
Bending test attachment	1 set
Tool kit	1 set
Extensometer	1 set
Photoelectric coder	1 pc
Load cell	1 pc
Data-processing system: (TIME plug-in ready to use controller)	1 set
TIME software: V 1.90.P (or higher version)	1 set
PC+Printer	1 set
Servo speed adjusting system for WDW	1 set

Software main interface

WinWDW Control Software

Easy to control and friendly interface
MS windows based interface, easy and fast to reach different functions, suitable for most of operators using habits.

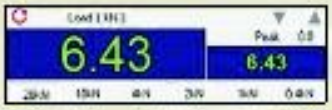
Full digital display and computer control
Adopt TIME-SHIJIN Controller, Fast response and reliable to parameter gathering. Realize the digital adjustment and zeroing of LOAD, DEFORM and DISPLACEMENT as well as PID parameter adjusting.

Manual or Program control of test process

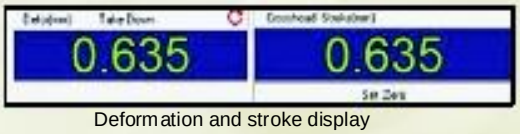
WinWDW Software provides multi functional control mode: Stroke & Program.

In stoke control mode, operator can define customized test speed to conform with different test standard. Preset limit position and return position will secure the safety and return the crosshead automatically after test finished.

In program control mode, the testing machine is controlled by conditional programs, operator can input each condition to regulate test process, software can realize constant parameter control through this function.

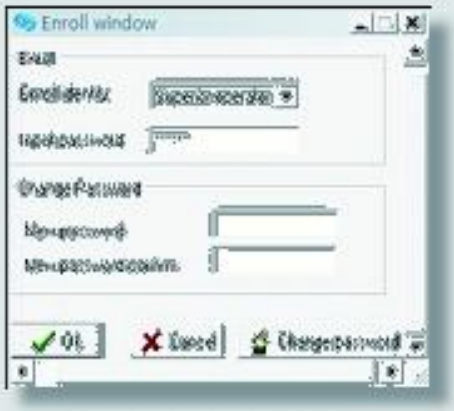


Test load and peak value display

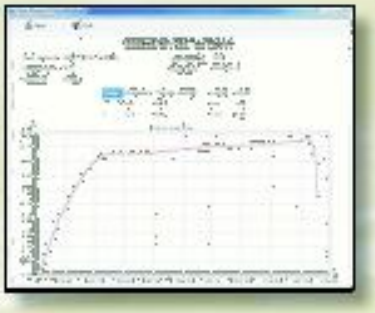


Deformation and stroke display

Multilevel Authorization Access
The software regulated different access level to protect machine calibration parameters. Reliable to secure the information safety and easy for software maintenance.



Test speed manually adjustable



Single material test report

Coordinates point test report

Batch material test report

TIME-SHIJIN Controller

Plug In ready to use PCI control card, suits all kinds of personal computer and main board. Full digital measure and control circuit. Provided with Load, displacement & Deformation different measuring channel. Close loop control by simply software configuration.

Perfection of diagramming functions

Realize the testing diagram online display and reproduction.

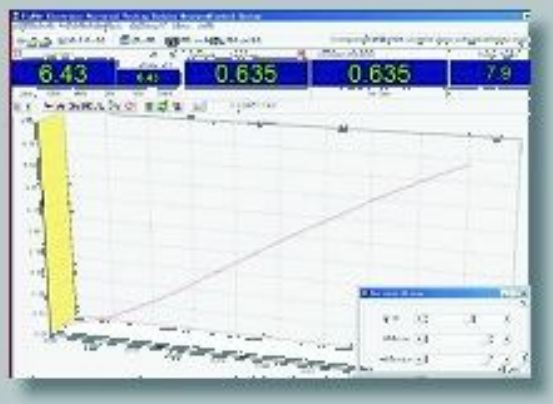
Zoom in or out the test diagram at any place with any rate.

Auto suit the diagram according to display resolution.

"Diagram fold" to enable with material difference analysis.

Print "section diagram" function

Coordinates point tracing to check the test results in each point.



3-D coordinates display

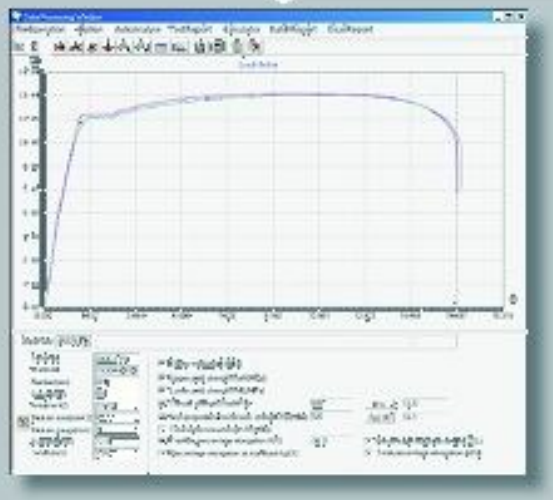


Diagram fold

Test report creation

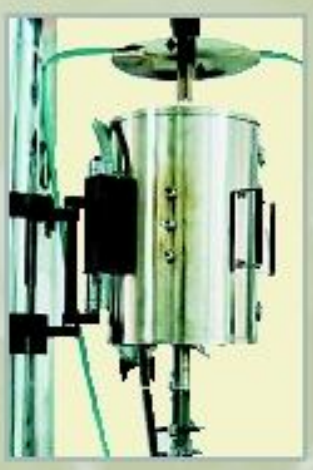
- The WinWDW provide different way to create test report
- Single material test report
- Batch material test report
- Customized test report
- Coordinates point test report

Main Technical Specification

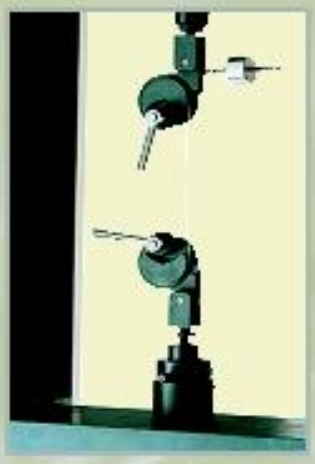
Specification	WDW-300E	WDW-200E	WDW-100E	DW-50E	WDW-20E/10E/5E	W-2E/1E
Features	Adopting speed-adjusting system and motor full digital measuring and controlling system					
Intensity (kn/mm)	600	400	300	250	80	10
Load range	0.4%-100% of the max load					2%-100% of the max load
Accuracy of test load	<±1%(accuracy level±0.5%)<±1%					
Frame accuracy	all oftheassemblesaremadeinhighprecisionprocessingcentremachinetools, guarantee the accuracy of the machine					
Precision of Ball Screw	16μm/300mm E level all the ball screw are made by milling					
Accuracy of deformation	<±1% within the 2%-100% full range of the extensometer					
Crosshead stroke accuracy	0.001mm 0.01mm					
Accuracy of indication value of test load	<±1% (accuracy level±0.5%)					
Resolution of load	1/200000 of the max load force					
Scope of deformation measure (normal extensometer)	2%-100% FN					
Accuracy Indication of deformation (normal extensometer)	within ±0.5% of indication value					
Scope of deformation measure (High deformation extensometer)	10mm-800mm					
Accuracy Indication of deformation (High deformation extensometer)	within the ±0.5% of the value					
Resolution of crosshead stroke	0.001mm					
Adjustment scope of test speed under Load control mode	0.005-5%FN/S					
Accuracy of test speed under Load control mode	Test Speed<0.05%FN/s,within the ±2% of the preset value, while Test Speed¡Ý0.05%FN/s, within the ±0.5% of the preset value					
Adjustment Scope of deformation rate	0.005-5%FN/S					
Accuracy of deformation rate	Test Speed<0.05%FN/s,within the ±2% of the preset value, while Test Speed¡Ý0.05%FN/s,within the ±0.5% of the preset value					
Adjustment scope of stroke speed	0.005mm/min-500mm/min					0.05mm/min-500mm/min
Accuracy of stroke speed	Test speed<0.01mm/min, within the 1.0% of instaled value, while test speed¡Ý0.01mm/min, within the 1% of the installed value					
Scope of the consistant load deformation and displacement control	0.5%-100%FN/s					
Accuracy of the consistant load deformation and displacement control	Installed value¡Ý10%FN,within the 0.1% of the installed value; while installed value<10%FN, within in the 0.2% of the value					
Length of the test space•i mm•j	600	600	600	600	800	800
Width of the test space(mm)	575	600	600	575	370	350
Dimension•i mm•j	1110 × 785× 2525	1100 × 770× 2558	1010× 750× 2210	945× 654× 2176	775× 500× 1717	520× 350× 1500
Test accessory	Standard accessory with different customized test accessory					
Weight(kg)	2000	1560	1100	700	250	100
Power•i Kw•j	5	3	1.5	1..5	0.4	0.5
Type of machine	able/floor type		FlooTr type			Single column table type

Automatic hydraulic tension grip

High-low temperature chamber



Elevated temperature furnace



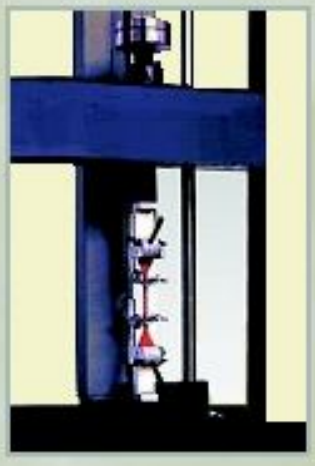
Steel wire winding tension grip

Step-type gripping jaws

Shear attachment

Film & paper tension grip

Puncture attachment



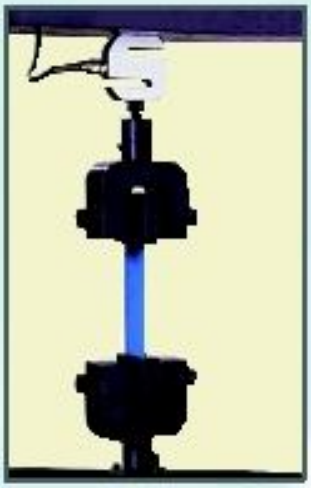
Eccentric wheel tension grip

F900A auto clamp tenson grips

High deformation extensometer

Spring tension grip

Manual tension grip

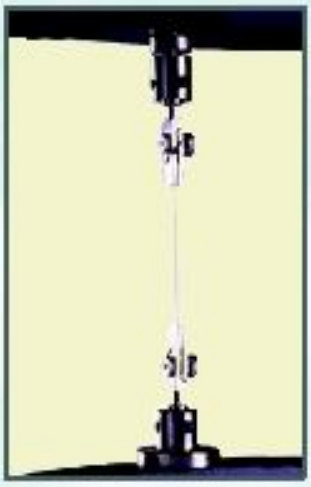


Opposite clamping grip

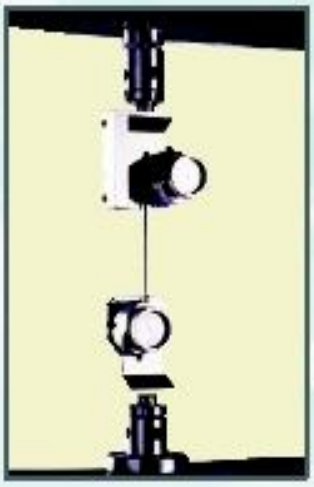
Load cell

Small deformation extensometer

Peeling test grip



Rope & string grip



Hard steel wire grip

Silk & thread tension grip

Bending test attachment for automobile bumper

Belt shape tension test attachment

Metal piece cupping test accessory

Pneumatic opposite clamping grip