

TIME GROUP INC.
www.timegroup.com

Ver 4.0



TIME **TIME GROUP INC.**
www.timegroup.com

Headquarters:

Beijing Office:

Add: No.38 Shangdi West Road, Haidian District, Beijing 100085, China
Tel: +86-10-62980816
Fax: +86-10-62985475
E-Mail: niyan@timegroup.com.cn

 **JINAN SHIJIN GROUP CO.**
www.shijin.com

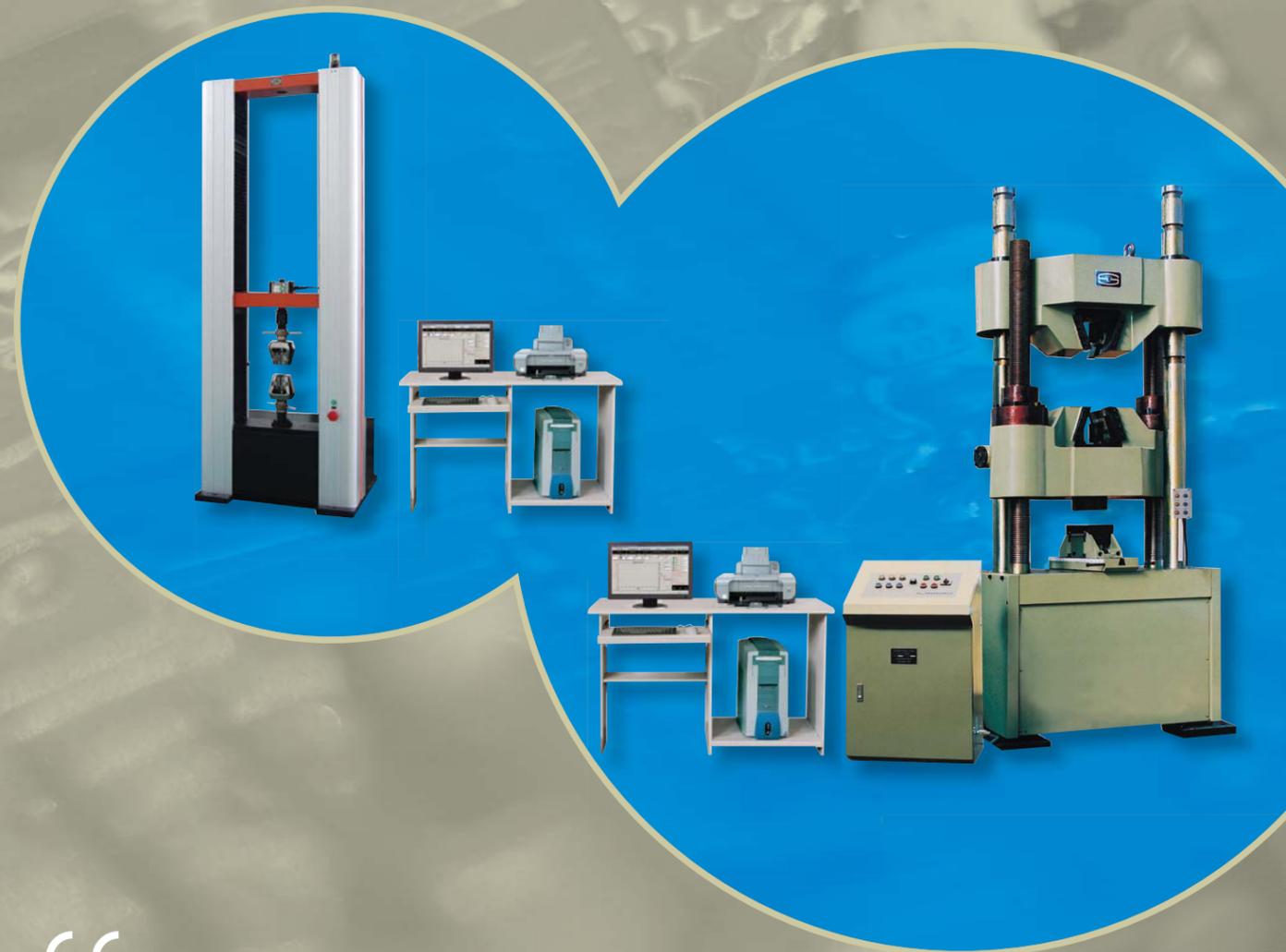
Factory Location:

Jinan Office:

Add: No.24 Jiwei Road, Jinan, Shandong Province, 250022, China
Tel: +86-10-82783720
Fax: +86-10-62980724

Regional Agent:

MATERIALS TESTING MACHINE



JINAN SHIJIN GROUP CO.
www.shijin.com

Enterprise Introduction

Time Group Inc. is a high-tech testing equipment manufacturer, which was founded in 1984. At present, Time owns more than 200 million dollars of capitals and 40 branches both at home and abroad. With the effort of 2000 Time staff members, Time gained 130 million dollars of turnover in 2008. In addition, the reputation of Top 500 of China machinery industry also further certified the strength of Time Group Inc.

In 2003, the strategic combination of Time Group Inc. and Jinan Shijin Group Co., (the biggest testing machine manufacturer in China) leads the development of China testing machine industry to a higher international level.



JINAN SHIJIN Group Co. was established in 1952. Equipped with 800 sets of processing machines and a professional expert team of testing machines, Shijin realizes yearly productivity of 6000 sets of testing machines. Based on 56 years' history of manufacturing testing machines in China, focusing on R&D, Shijin launched 6 sets of newly designed testing machines (WDW-100E, WDW-200E, WAW-1000D, YE-S2000C, MM-W1A, and MR-S10B) into the international market in 2007 and 2008 respectively. Keeping on innovating and offering the best solutions with greater speed and lower cost are always the tenets of Time and Shijin.



ISO 9001



TÜV CE Certification



ISO Product conformity certificate

Company Honor

Technology:

TIME SHIJIN Group have about 60 years experience in manufacturing testing machines, and we bring up a team of elite who is dedicating in testing machine industry both in researching and developing.

We have more than 60 professional technicians, include 3 experts who is taking national allowance from State Department.

After recombination with TIME Group Inc. we achieved the real technical resource share, and TIME SHIJIN Group become an enterprise which is devoting to technology innovation.



Manufacturing:

Since year 1952, the company is performing technology development every year. Now, we have different producing machine 1259 units; grand processing machine tools 4 units. Achieved the production of each machine parts of testing machine: include machine screw, oil cylinder, oil piston and so on. Strictly ensure the accuracy of whole testing machine.



CONTENTS



TIME GROUP INC.

www.timegroup.com

- 1** | WDW Series Computer Controlled Universal Testing Machine
- 3** | TIME-SHIJIN Software Introduction
- 5** | WDW Series Machine Specification
- 6** | WDW Test Accessory
- 8** | WAW Series Servo Hydraulic Universal Testing Machine
- 10** | WAW Machine Specification
- 11** | WEW Series Computer Display Hydraulic Universal Testing Machine
- 12** | WEW Series Computer Display Hydraulic Universal Testing Machine Specification
- 13** | WINWAW General test software for Hydraulic Testing Machine
- 15** | WE-Series Analog Dial Display Hydraulic Universal Testing Machine
- 17** | Test Accessory For Hydraulic Universal Testing Machine
- 18** | YAW-300B Computer Controlled Servo Hydraulic Cement Compression Testing Machine
- 19** | YAW Series Computer Controlled Hydraulic Direct Compression Testing Machine
- 20** | YE-W Series Computer Display Hydraulic Direct Compression Testing Machine
- 21** | YE-S Series Digital Display Direct Compression Testing Machine
- 22** | JYS-2000A Digital Display Building Materials Compression Testing Machine
- 23** | NJS-02 Digital Display Torsion Testing Machine
- 24** | TNS-DW Series Micro-computer Controlled Torsion Testing Machine
- 25** | JB Series Metal Materials Charpy Impact Testing Machine
- 26** | JB Series Impact Testing Machine Control Software
- 27** | XJ Series Non Metal Materials IZOD / Charpy Impact Testing Machine
- 28** | Sample Preparation Machine for Impact Test
- 29** | XT-50 Projection Screen
- 29** | DWC-60A Low Temperature Chamber For Impact Specimen
- 30** | PQW-800 Computer Controlled Light Alloy Wheel Rolling Bend Fatigue Testing Machine
- 31** | PJW-10 Computer Controlled light Alloy Wheel Radial Load Fatigue Testing Machine
- 32** | PNW-1400 Computer Controlled Light Alloy Wheel Torsion Fatiguetesting Machine
- 33** | JLS-700 Light Alloy Wheel Radial Impact Testing Machine
- 34** | RX Series Winding Machine For Transformer
- 35** | Other Machine We Manufacture

WDW Series Computer Controlled Universal Testing Machine

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.

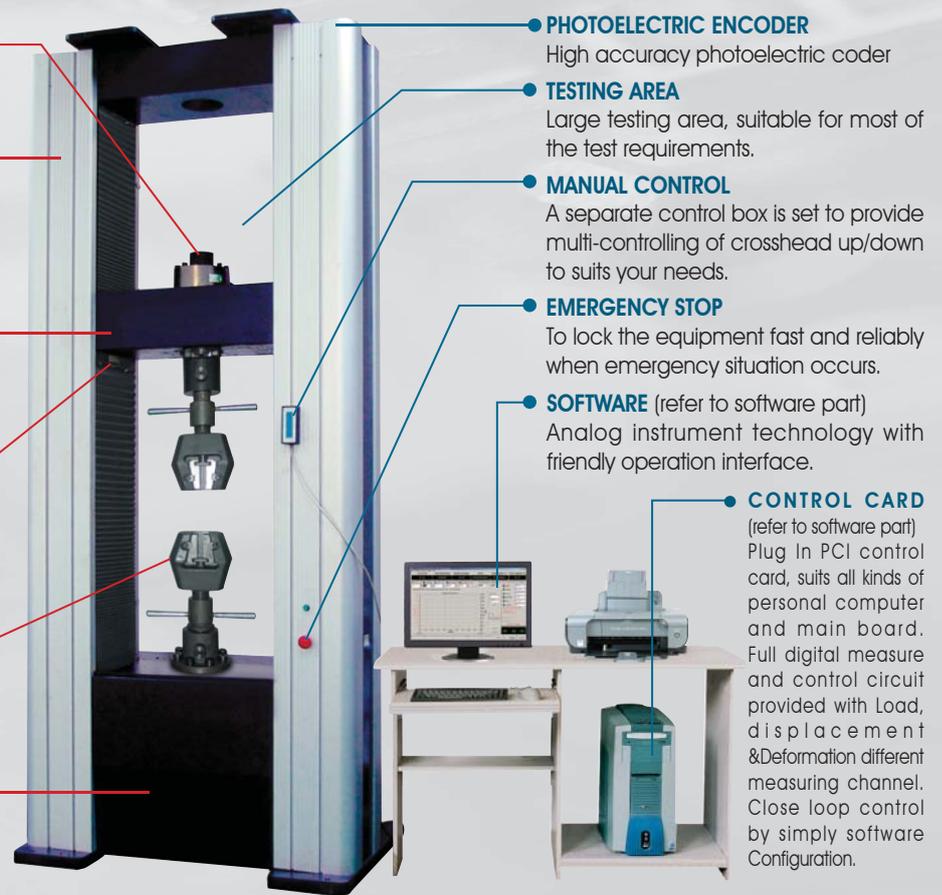


WDW-J1



WDW-5E

- LOAD CELL**
Overload protect High accuracy Force transducer
- MACHINE COVER**
Aluminum alloy cover and streamlined 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.

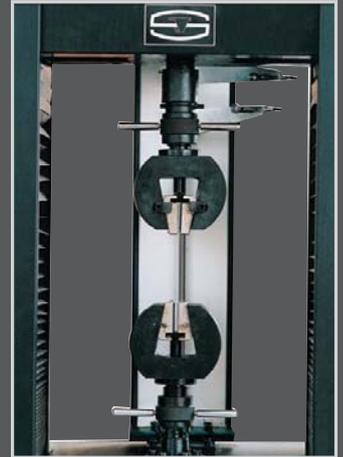
Control software has the auto-adjusting function of test hardness, which assures that the system works with every kind of specimen hardness.

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



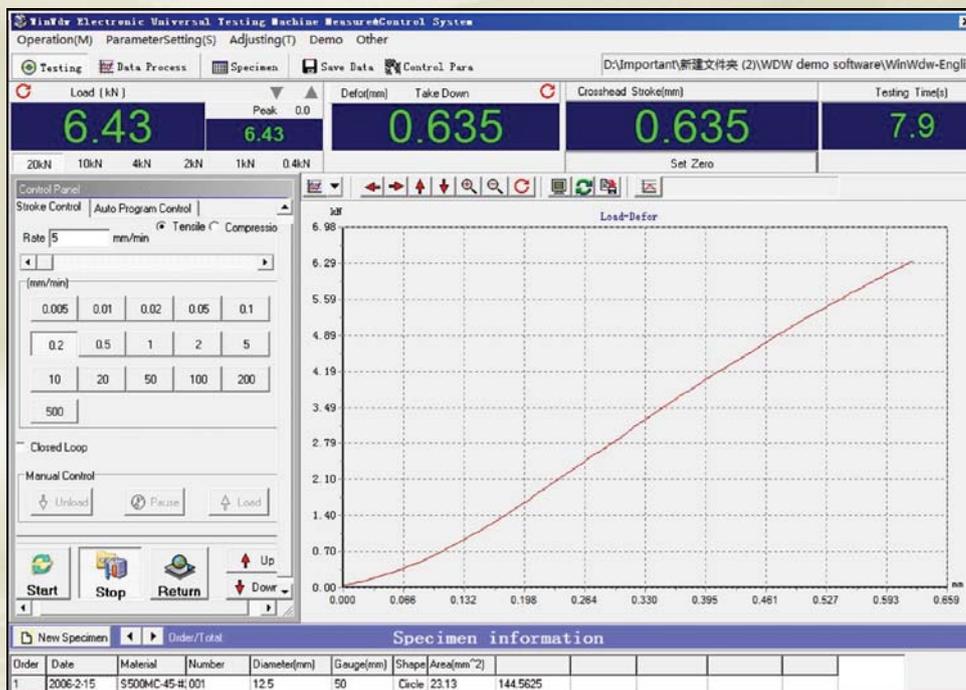
Compression



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.

Step	Control Mode	Control Parameter	Jumping Term
1	constant speed stroke	stroke speed:7.2mm/min	load up to1kN,jump to step 2
2	constant speed load	load speed:0.5kN/s	load up to7kN,jump to step 3
3	load keeping	keeping target:7kN	keeping time:30s,jump to step 4
4	constant speed load	load speed:0.5kN/s	load up to10kN,jump to step 5
5	load keeping	keeping target:10kN	keeping time:30s,jump to step 6
6	constant speed stroke	stroke speed:18mm/min	load up to11kN,jump to step 7
7	stop		



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.

Enroll window

Enroll identity: Superior operator

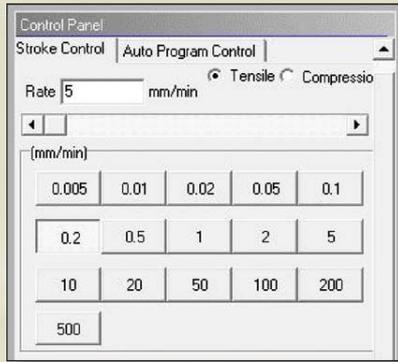
Input password: [masked]

Change Password

New password: [input field]

New password confirm: [input field]

Buttons: Ok, Cancel, Change password



Test speed manually adjustable

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

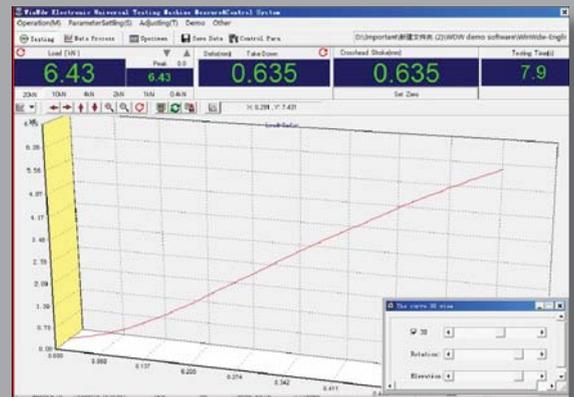
Coordinates point tracing to check the test results in each point.



Single material test report

数据序号	力值(N)	位移(mm)	位移(mm)	时间(s)
0	0.0000	0.0000	0.000	0.000
1	0.0450	0.0000	0.000	0.060
2	0.0456	0.0000	0.000	0.100
3	0.0480	0.0025	0.002	0.140
4	0.0509	0.0037	0.004	0.180
5	0.0562	0.0037	0.004	0.220
6	0.0651	0.0075	0.007	0.260
7	0.0746	0.0100	0.010	0.300
8	0.0876	0.0125	0.012	0.340
9	0.1018	0.0162	0.016	0.380
10	0.1178	0.0187	0.019	0.420
11	0.1396	0.0225	0.022	0.460
12	0.1539	0.0262	0.026	0.500
13	0.1729	0.0300	0.030	0.540
14	0.1906	0.0325	0.032	0.580
15	0.2090	0.0362	0.036	0.620
16	0.2267	0.0400	0.040	0.660
17	0.2451	0.0437	0.044	0.700
18	0.2623	0.0463	0.046	0.740
19	0.2800	0.0500	0.050	0.780

Coordinates point test report



3-D coordinates display

Index	Number	Diameter	Width	Flange	Max Load	Max Strength	Elastic modulus	Upper yield strength	Rp	Rt	A	Z	Lower yield strength	Material
		mm	mm	mm	kN	MPa	GPa	MPa	MPa	%	%	%	MPa	
1	1	12.5	1.85	53	13.5	585		520						5500MC-45-4025
2	2	12.5	1.85	53	13.5	585		520						5500MC-45-4025
3														
4														
5														
Min Value		12.5	1.85	53	13.5	585	0	0	520	0	0	0	0	
Max Value		12.5	1.85	53	13.5	585	0	0	520	0	0	0	0	
Average Value		12.5	1.85	53	13.5	585	0.0000	0.0000	520	0.0000	0.0000	0.0000	0.0000	

Batch material test report

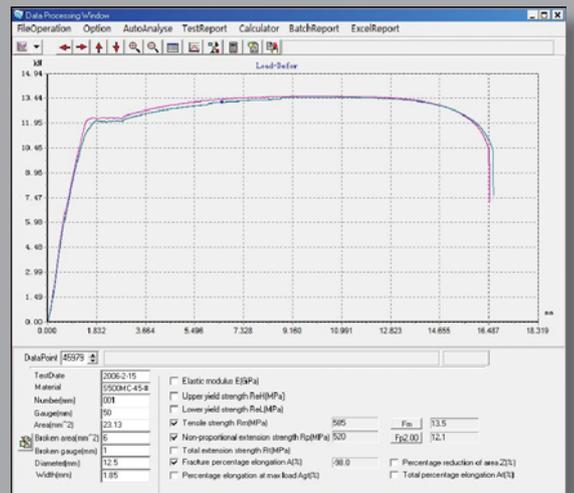


Diagram fold



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.

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	WDW-50E	WDW-20E/10E/5E	WDW-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 of the assembles are made in high precision processing centre machine tools, guarantee the accuracy of the machine					
Precision of Ball Screws	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 ≥ 0.05%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 ≥ 0.05%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 < 0.01 mm/min, within the 1.0% of installed value, while test speed ≥ 0.01 mm/min, within the 1% of the installed value					
Scope of the constant load deformation and displacement control	0.5%-100%FN/s					
Accuracy of the constant load deformation and displacement control	Installed value ≥ 10%FN, within the 0.1% of the installed value; while installed value < 10%FN, within the 0.2% of the value					
Length of the test space (mm)	600	600	600	600	800	800
Width of the test space (mm)	575	600	600	575	370	350
Dimension (mm)	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 (Kw)	5	3	1.5	1.5	0.4	0.5
Type of machine	Floor type				Table/floor type	Single column table type

Other Important Accessories (Frequent use optional accessory):



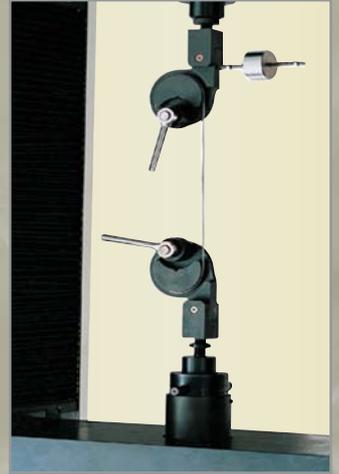
Automatic hydraulic tension grip



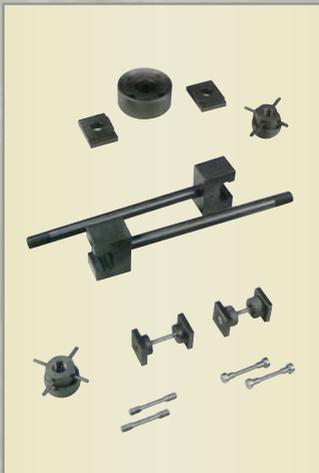
High-low temperature chamber



Elevated temperature furnace



Steel wire winding tension grip



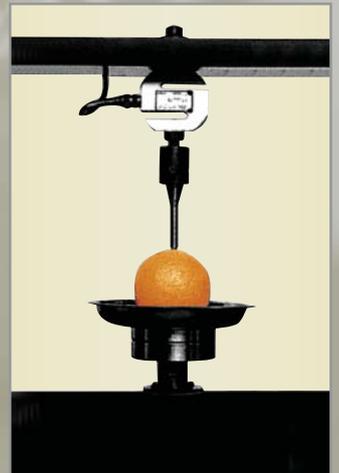
Step-type gripping jaws



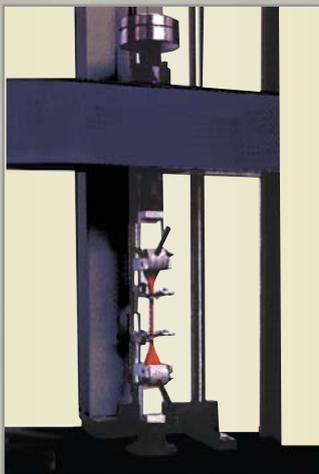
Shear attachment



Film & paper tension grip



Puncture attachment



Eccentric wheel tension grip



F900A auto clamp tension grips



High deformation extensometer



Spring tension grip

Other Important Accessories (Frequent use optional accessory):



Manual tension grip



Opposite clamping grip



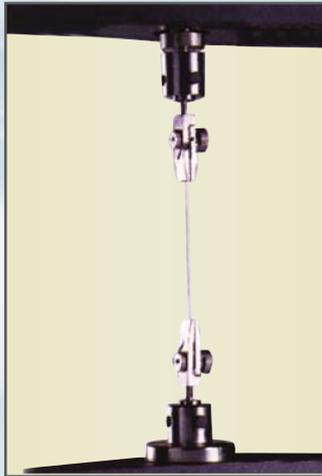
Load cell



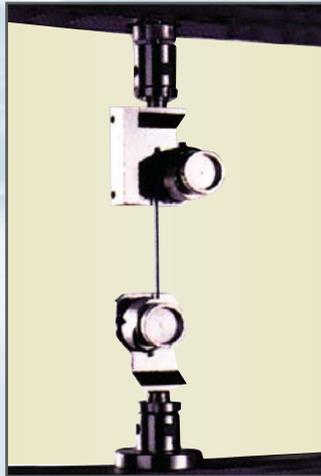
Small deformation extensometer



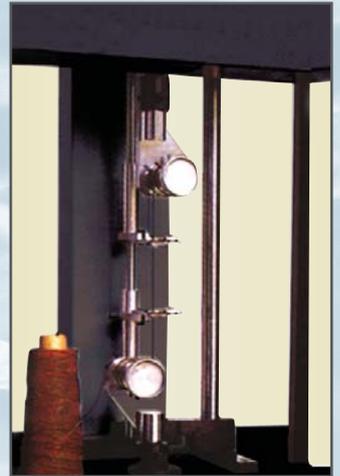
Peeling test grip



Rope & string grip



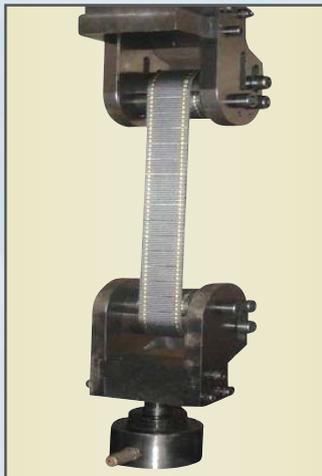
Hard steel wire grip



Silk & thread tension grip



Bending test attachment for automobile bumper



Belt shape tension test attachment



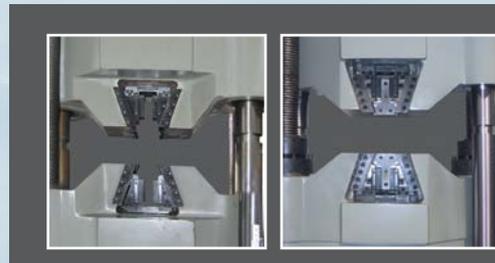
Metal piece cupping test accessory



Pneumatic opposite clamping grip

Main Applications:

WAW Series machine, compared with a ball screw type electric mechanical UTM, is adopting oil hydraulic power to push the piston in the oil cylinder to provide loading force. Therefore it is very suitable for making test to different metal or nonmetal materials under high toughness and hardness against extreme big loading force. By using oil pressure transducer and photoelectric encoder, the computer is timely collecting the testing parameters like loading force, stroke etc. The servo system will provide on line close loop control and constant parameters control. The test software is able to create customized testing methods and setup testing report in only a few steps. WAW series is widely used in different inspection department, engineering area, universities and institutes.



GRIP JAW TYPE

Optional "open" (C type) or "semi open" (Y type) type grip jaw. Suitable for different test intensity.

UPPER CROSSHEAD

Upper crosshead position can be adjusted according to the length of test samples.

AUTO HYDRAULIC GRIP

Independence wedge action hydraulic grip, firmly hold the samples. Secure the safety and reliability during tensile tests.

LOWER CROSSHEAD

Lower crosshead is driven by motor and gear to make it move up and down to preset gripping distance.

TEST SPACE

Adopts double test space; use upper test space to make tensile tests, use lower test space to make compression tests.

OIL CYLINDER

Refined high precise oil cylinder secure the stability of load and accuracy of test results.

ELECTRIC CABINET

Electromagnetic proof cabinet, improve the reliability and stability of the whole electric system.

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.



WAW-1000C



CALIBRATION REPORT FROM NACIS FOR WAW SERIES TESTING SYSTEM

WAW Series Servo Hydraulic Universal Testing Machine

Features:

Full computer controlled of testing process.

Adopt oil-hydraulic automatic clamps which can be operated from separate control box.

Wedge tension jaw processed by advanced technology; increase the stiffness of crosshead under high load and high intensity tests.

Powerful multifunctional control software will provide more testing methods to meet ASTM, ISO and other testing standards.

Report Guide will create your testing report in only three steps.

Programable testing software makes LCF testing or cyclic testing become available.

Overload protection will secure operators.



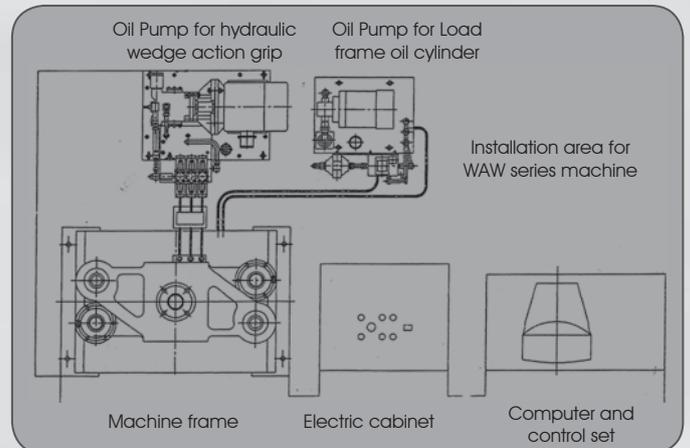
WAW-50A/100A



WAW-1000A



WAW-2000A



Main Technical Specifications:

Specification	WAW-100A	WAW-100C	WAW-300C	WAW-300A	WAW-500C	WAW-600C	WAW-600A	WAW-1000C	WAW-1000A	WAW-2000A
Load range	2%-100%FN ,no rank or Simulation ranks. Optional resolution: 1/1000 or 1/2000 (EDC controller) or 1/2000000									
Piston stroke (mm)	250	150	250	300	250	300	300	250	250	
Measure of stroke (mm)	0.01									
Test space (include piston stroke) (mm)	600	580	600	550	900	600	600	600	780	850
Compression	355	500	550	300	800	550	300	540	650	720
Overall dimension (mm)	2560 x 2200 x 2750	2560 x 2200 x 2040	2600 x 2200 x 2350	2600 x 2000 x 2987	2760 x 2200 x 2633	2760 x 2200 x 2633	2600 x 2000 x 3290	3020 x 2200 x 3070	3020 x 2000 x 4000	3280 x 2200 x 4700
Distance between columns (mm)	395	435	530	590	650	650	580	760	675	900
Compression	255			380			370		490	690
Load frame net Weight (kg)	1250	1500	2300	2200	3000	3000	2900	6800	5000	10400
Max load (kN)	100	100	300	300	500	600	600	1000	1000	2000
Accuracy of test load	± 1%									
Attenuation of deformation amplifier	1,2,5,10									
Max griped width of flat specimen (mm)	70	70	70	70	80	80	80	70	125	140
Griped thickness of flat specimen (mm)	0-15	0-15	0-15	0-15	0-30	0-30	0-30	0-55	0-40	0-50
Griped dia of round specimen (mm)	Φ6-Φ22	Φ6-Φ22	Φ10-Φ32	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ40	Φ12-Φ60	Φ13-Φ60	Φ10-Φ70
Dimension of compression plates (mm)	Φ125	Φ125	Φ130	Φ120	204x204	Φ120	204x204	204x204	204x204	204x204
Span of bending support (mm)	600	350	350	100-1000	600	600	1000	100-800	1000	800
Length of the bending roller (mm)	100	100	140	140	140	140	140	140	140	140
Max bending flexibility (mm)	80	80	100	100	100	100	100	150	150	190
Dimension of specimen for shear (special order)	10	10	10	10	10	10	10			
Power of the pump motor (kw)	1.5	3	3	3	3	3	3	3	3	7
Device of measuring deformation	Electronic Extensometer									
Relative error of deformation measuring	± 0.5% or ± 1%									
Crosshead adjust structure (Means of transmission)	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Common motor worm gear drive
Safety protection	Software overload protection and mechanical limit switch									
Overload protection rate	2%-5%									
Software	TIME SHIJIN software									
Dimension of load frame (include piston stroke) (mm)	610 x 700 x 2750	760 x 500 x 2040	900 x 600 x 2350	1250 x 560 x 2987	1100 x 1200 x 2633	1100 x 1200 x 2633	1255 x 660 x 3290	1320 x 800 x 3070	1255 x 866 x 4000	1510 x 1040 x 4700
Dimension of control cabinet (mm)	600 x 400 x 960									
Speed of stroke (mm/min)	≥ 70 (or control by the software)									≥ 50 (or control by the software)



WEW Series Computer Display Hydraulic Universal Testing Machine

Features:

WEW Series machine is adopting oil hydraulic power to push the piston in the oil cylinder to provide loading force. It is very suitable for making test to different metal or nonmetal materials under high toughness and hardness against extreme big loading force. By using load transducer and photoelectric encoder, the computer is timely collecting the testing parameters like loading force, stroke etc. This machine is adopting manual control mode and computer collecting and displaying methods to process the testing parameters. The software based on Windows system is able to make automatic calculating of test results, i.e. tensile strength, up / low yield strength, Non proportional stress point etc. Report creation function makes it is very simple to make testing report in needed format. This machine is widely used in different areas and facilities.

CROSSHEAD MOVING

Crosshead is directed by reeling screw column. So that to meet different length of specimen.

FRAME STRUCTURE

High intensity 4 columns structure load frame. Very stable and reliable during high force tests.

COMPRESSION TEST

Adopt double-test-space, easy to achieve tensile test and bending test at the same time.

STROKE CALCULATE

Crosshead displacement is counted by a scale or software through photoelectric encoder (OPTIONAL)

OIL CYLINDER

Oil cylinder is put at the bottom to reduce unnecessary machine height.

THE GRIPS

Auto Wedge Clamp, firmly hold the specimens. Convertible grip will fit for different kinds of specimen.

OIL CONTROL CABINET

Two handwheels manually control the inlet and outlet quantity of oil to apply load on samples.

DIGITAL DISPLAY & RESULT OPERATION

TIME SHIJIN Controller directly collect testing data, fast results process and display.



WEW-1000D

Features:

- ◆ Full computer displayed of testing process.
- ◆ Manual loading speed will meet your appropriate testing speed.
- ◆ Adopt manual / oil-hydraulic automatic clamps which can be operated from separate control box.
- ◆ Timely control software will provide accurate record of testing process.
- ◆ Report guide will create your testing report very simply.
- ◆ Overload protection will secure operators.

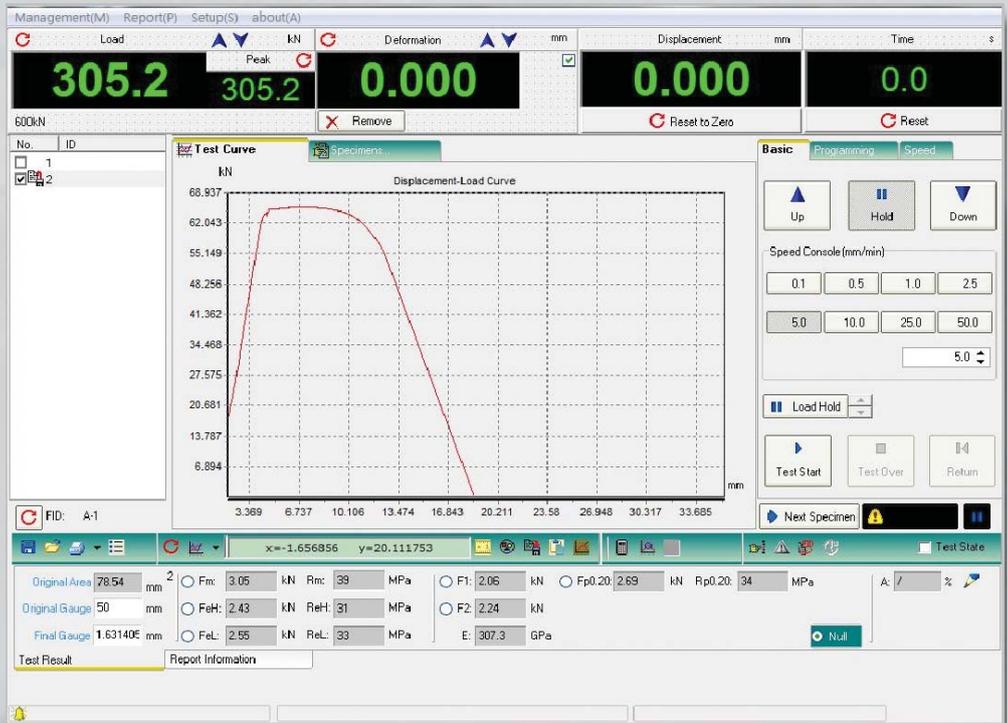
Main Technical Specifications:

Specification Model	WEW-50A	WEW-100A	WEW-100C	WEW-300A	WEW-300C	WEW-300D	WEW-600A	WEW-600C	WEW-600D	WEW-1000A	WEW-1000C	WEW-1000D	WEW-2000A
Max. load(kN)	50	100	300	600	1000	2000							
Attenuation of load amplifier	Stepless, equivalent 3 scales												
Accuracy of test load	Stepless, equivalent 4 scales												
Accuracy of deformation	< ± 1%												
Scope of deformation measure	< ± 1%												
Grip Dia. of round specimen (mm)	2%-100% of the full scale of the extensometer												
Grip Thickness of flat specimen (mm)	Φ3-Φ14	Φ6-Φ22	Φ10-Φ32	Φ10-Φ32	Φ10-Φ32	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ40	Φ12-Φ60	Φ13-Φ60	Φ13-Φ60	Φ15-Φ70
Max distance between grips (include piston stroke) (mm)	0-15	0-15	0-15	0-15	0-15	0-15	0-30	0-30	0-30	0-55	0-60	0-60	0-50
Space for compression (mm)	0-355	0-500	0-300	0-300	0-550	0-500	0-300	0-550	0-450	0-800	0-650	0-800	0-720
Columns distance (mm)	Tension 395	435	590	530	460	580	650	650	515	760	675	565	900
Attenuation of deformation amplifier	255	380	370	1,2,5,10									
Max grip width of flat specimen (mm)	70	70	70	70	70	70	80	80	80	125	70	125	140
Dimension of compression plates (mm)	Φ125	Φ125	Φ130	Φ120	Φ120	204x204	Φ120	204x204	204x204	Φ160	204x204	204x204	204x204
Span of bending roller (mm)	600	350	1000	350	350	1000	800	800	800	800	1000	800	800
Length of bending roller (mm)	100	100	140	140	140	140	140	140	140	140	140	140	140
Max bending flexibility (mm)	80	80	100	100	100	100	100	100	100	150	150	150	190
Dimension of specimen for shear (mm)(Optional accessory)	10	10	10	10	10	10	10	10	10				
Power of pump motor (kw)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	7
Power of crosshead motor (kw)	0.55	0.55	0.75	0.37	0.6	1.1	0.6	0.6	0.6	3	0.6	0.6	2.2
Measuring device of deformation	Extensometer												
Crosshead adjust structure (Means of transmission)	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive	Disc motor worm gear drive	Ordinary motor worm gear drive
Safety protection	Limited switch												
Overload protection rate	2%-5%												
Software	TIME SHIJIN Software												
Dimension of mainframe (include piston stroke) (mm)	610x700x2150	610x700x2150	900x600x2040	1250x560x2987	1100x200x2350	740x550/145	1000x700x3290	1100x1200x2633	1255x660x2265	800x1320x4000	1320x800x3070	125x866x2510	1510x1040x4700
Dimension of the control cabinet (mm)	610x700x1100												

SOFTWARE MAIN INTERFACE

Integrate design of main control interface could realize the machine control, digital display, diagram display and test results process at the same time. MS windows based core program, easy and fast to reach different functions.

Be suitable for **WAW**, **WEW** and **YAW** series Hydraulic testing machine.



WINWAW software interface

FULL SOFTWARE CONTROL (WAW and YAW series capable only)

STROKE CONTROL

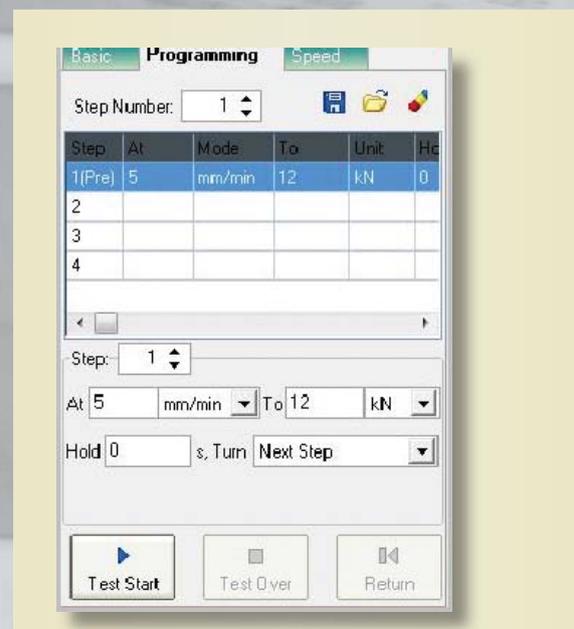
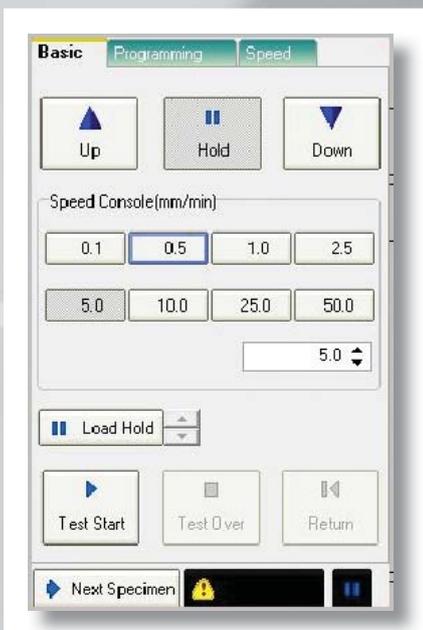
User can define a customized test speed to make tensile, compression or other tests.

The speed is adjustable through this control panel.

PROGRAM CONTROL

User can input programming conditions to regulate test process. Suitable for bulk test conditions and cyclic tests.

100 steps programs available.





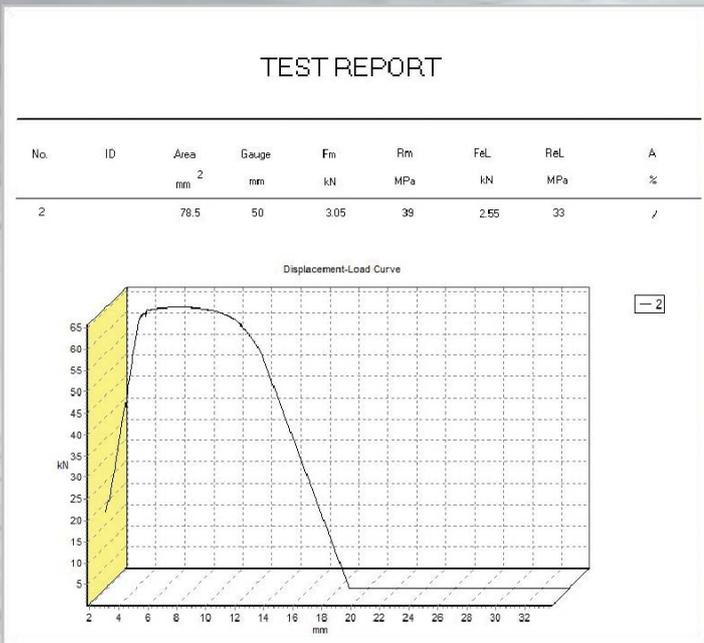
Multilevel authorization access



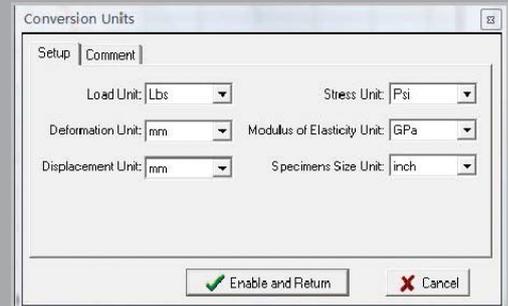
Test speed timely display



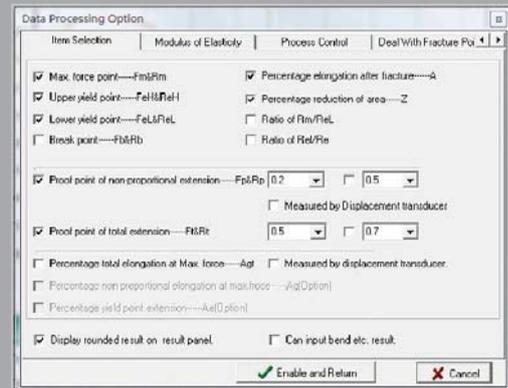
Over load protection and stop condition



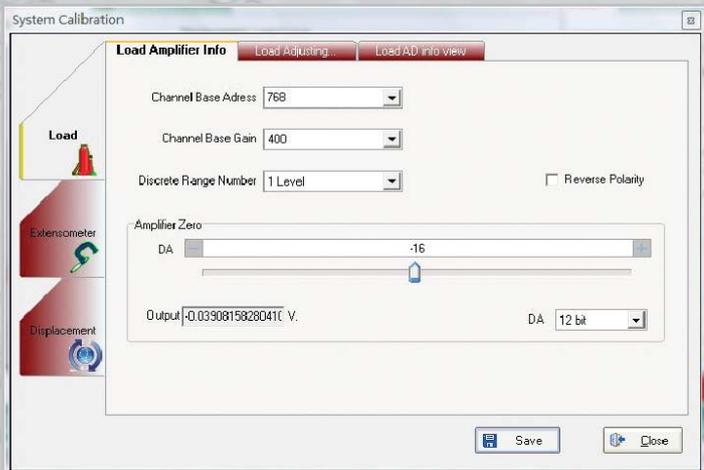
Fast test report creation



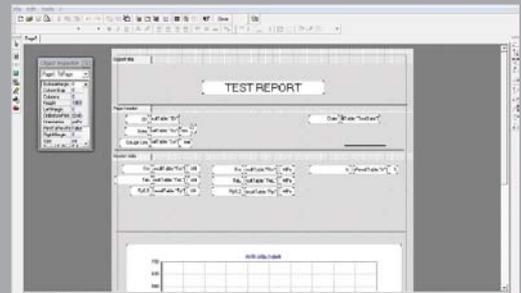
International test unit exchange



International standard test results process methods input



Easy software calibration

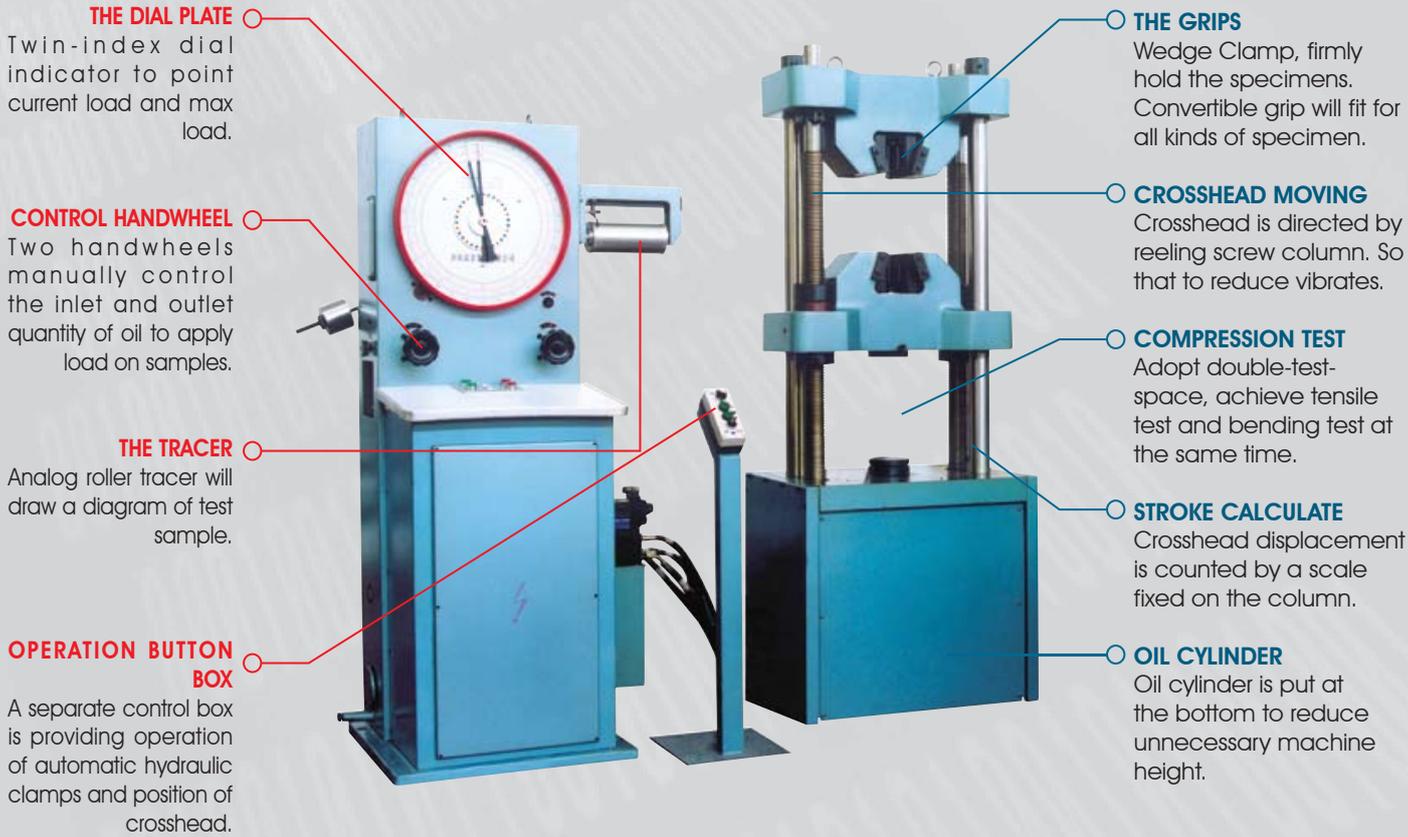


Customized test report edit

WE-Series Analog Dial Display Hydraulic Universal Testing Machine

Features:

WE Series Hydraulic Universal testing machine is adopting oil hydraulic power (as WAW & WEW series) to push the piston in the oil cylinder to provide loading force on samples. It adopts analog dial dynamometer to display the test results. The loading force is displayed on the dial platen and the liner scale will indicate the stroke. The roller tracer equipping with machine dynamometer, and it is suitable to draw an analogical test curve on a coordinates paper. The machine have been adopting in many fields like construction area, inspection area, teaching area and so on.



WE-300D



WE-50/100



WE-300/600



WE-1000D



WE-1000C

Main Technical Specifications:

Specification	WE-50	E-100	WE-100C	WE-300/300A	WE-300C	WE-300D	WE-600/600A	WE-600C	WE-600B	WE-1000A	WE-1000C	WE-1000D	WE-2000A	
Max. load (kN)	50	100	100	300	300	300	600	600	600	1000	1000	1000	2000	
Ranges and min scale	0-10kN,0.02kN/grid 0-25kN,0.05kN/grid 0-50kN,0.10kN/grid	0-20kN,0.04kN/grid 0-50kN,0.10kN/grid 0-100kN,0.20kN/grid	0-60kN,0.2kN/grid 0-150kN,0.5kN/grid 0-300kN,1.0kN/grid	0-60kN,0.2kN/grid 0-150kN,0.5kN/grid 0-300kN,1.0kN/grid	0-120kN,0.5kN/grid 0-300kN,1.0kN/grid 0-600kN,2.0kN/grid	0-200kN,0.5kN/grid 0-500kN,1.0kN/grid 0-1000kN,4kN/grid	0-500kN,1kN/grid 0-1000kN,2kN/grid 0-2000kN,4kN/grid							
Accuracy of test load	< ± 1%													
Griped dia. of round specimen (mm)	Φ3-Φ14	Φ6-Φ22	Φ6-Φ22	Φ10-Φ32	Φ10-Φ32	Φ10-Φ32	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ40	Φ13-Φ40	Φ13-Φ60	Φ13-Φ60	Φ15-Φ70
Griped Thickness of flat specimen (mm)	0-15	0-15	0-15	0-15	0-15	0-15	0-15	0-30	0-30	0-30	0-30	0-40	0-40	0-50
Max distance between grips (include piston stroke) (mm)	600	600	580	550	600	600	600	600	600	780	600	600	600	850
Space for compression (mm)	0-355	0-355	0-500	0-300	0-550	0-500	0-550	0-300	0-450	0-650	0-540	0-470	0-720	
Dimension of dynamometer (mm)	1050 x 770 x 1775													
Dimension of mainframe (include piston stroke) (mm)	610 x 700 x 2750	760 x 650 x 2040	1250 x 650 x 2997	900 x 600 x 2350	740 x 680 x 2145	1255 x 640 x 3290	1100 x 1200 x 2633	890 x 680 x 2205	1255 x 865 x 4000	1320 x 800 x 3070	1100 x 900 x 2510	1510 x 1040 x 4700		
Power of motor (kw)	2	2	2.1	2.3	2	2.1	2.6	2.1	2.1	2.1	4.5	2.5	7	
Weight (kg)	1250	1500	2200	2300	1500	2900	3000	2500	5000	6800	5000	10400		
Test space (mm)	Tension	395	590	530	465	580	650	515	675	760	565	900		
	Compression	255	380			370			490			690		
Max griped width of flat specimen (mm)	70	70	70	70	70	80	80	80	125	70	125	140		
Dimension of compression plates (mm)	Φ125	Φ125	Φ120	Φ130	Φ120	204 x 204	Φ120	204 x 204	204 x 204	Φ160	204 x 204	204 x 204	204 x 204	
Span of bending support (mm)	600	350	1000	350	350	1000	600	600	1000	800	800	800		
Length of the bending roller (mm)	100	100	140	140	140	140	140	140	140	140	140	140		
Max bending flexibility (mm)	80	80	100	100	100	100	100	100	100	150	150	190		
Dimension of specimen for shearing (special order) (mm)	10	10	10	10	10	10	10	10	10					
Speed of piston (mm/min)	240	240	70	70	70	70	70	70	70	70	70	65		
Speed of crosshead (mm/min)	200	200	150	120	160	150	200	150	150	150	150	150		
Displacement measuring	Ruler													
Crosshead adjust structure (means of Transmission)	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Motor retarder chain drive	Common motor worm gear drive	Disc motor worm gear drive	Motor retarder chain drive	Common motor worm gear drive	Disc motor worm gear drive	Motor retarder chain drive	Common motor worm gear drive	Common motor worm gear drive	
Safety protection	Limite switch													
Mechanical overload protection rate	2%-5%													



Test Accessory

For Hydraulic Universal Testing Machine



Round Compression Plate



Square Compression Plate



Concrete test attachment



Tension Socket and Tension Ring



Gripping type Tension Socket



4-Points flexure test attachment



Round Grips



Seats for Tension Grips



Load proving ring



Steel Wire Tension Grips



Steel Wire Tension Grips Holder



Hydraulic inlet / outlet valve



Bending Head for Cold Bending Test
(different specification)



Bending Test Support



Oil cylinder dust proof cover

YAW-300B Computer Controlled Servo Hydraulic Cement Compression Testing Machine

YAW 300B

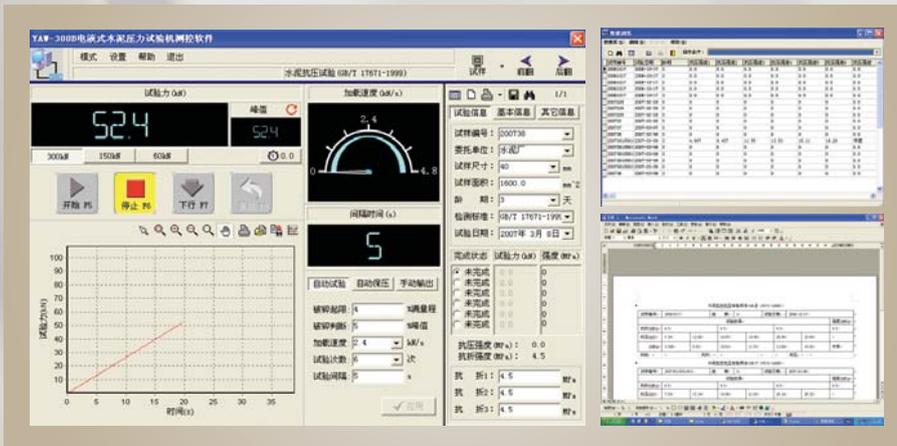
Main application:

This kind of testing machine is designed and used for compression test on cement block according to international test standard (ISO test method). Realize the close loop control, test result and test diagram display timely through a computer screen. Especially, this testing machine software have powerful network function and is able to automatically transfer the test results to many database management software.



Machine specification: (refer to YAW series specification list)

Test software:



Compression Accessory
(Specimen size adapter)

Software features:

Automatic test according to international test standard after press "START" button on the software. According to standard, the test will count the results of 6 specimens in one group and after each test the software will save the test results automatically

Safe and reliable software interface and control. The software will lock the buttons during test proceed; it is very easy to prevent mistake operation during the test stage which will cause damage to the testing machine

Constant test load apply and test load speed range: 0-5kN/s

Different test mode support: Auto test; Multi points load keeping; Manual output

Software judge the break point, automatic count and transfer test results

Easy and fast to edit test report to create customized test reports

YAW Series Computer Controlled Hydraulic Direct Compression Testing Machine

Brief introduction:

This series machine is used for direct compression tests for materials, especially suitable for those hard brittle materials. The machine is widely used in construction material tests like concrete, wood, carbon steel and rocks. By equipping with different control system, this compression testing machine can be servo controlled, computer displayed, LCD digital displayed. By changing different optional accessories, this series machine can make three points bending and four point bending tests.

YAW 3000A



HYDRAULIC CYLINDER

Fine machining down set oil cylinder, provides very stable load during high force compression tests.

YAW 5000F



LEAD SCREW COLUMNS

The length of lead screw determine the compression space. User can customize the length of this part.

ELECTRIC CABINET

Electromagnetic proof cabinet, improve the reliability and stability of whole electric system.



CROSSHEAD

Motor and Gear rotate makes the crosshead move up and down along the lead screw.

TIME-SHIJIN CONTROLLER

Original TIME Plug In ready to use PCI control card, suits all kinds of personal computer and main board. Full digital measure and control, realize the servo control of complete test system.



Main Technical Specifications:

Specification	YAW-300B	YAW-1000	YAW-2000D	YAW-2000B	YAW-3000	YAW-3000A	YAW-5000F	YAW-10000F
Max test load (kN)	300	1000	2000	2000	3000	3000	5000	10000
Load range	4%-100% of max test load							
Accuracy of load	≤ ± 1%							
Dimension of compression plate (mm)	φ 150	320 × 320	250 × 250	φ 300	φ 330	400 × 400	800 × 600	480 × 480
Compression space (mm)	250	0-500	0-500	300	0-650	0-1000	0-1500	300-4000
Piston stroke (mm)	35	150	150	150	150	200	200	250
Clearance of columns (mm)	285	460	540	540	560	560	670 × 870	1220 × 1270
Dimension of mainframe (mm)	540 × 540 × 1409	780 × 540 × 2650	1050 × 650 × 2100	1050 × 650 × 1700	1060 × 800 × 3200	1000 × 1480 × 3400	1400 × 1200 × 4045	1850 × 2100 × 7350
Weight of mainframe (kg)	600	2500	3500	3500	7000	5500	14000	48500
Power (kw)	2	2.6	3	3	7	7	8.5	25

YE-W Series Computer Display Hydraulic Direct Compression Testing Machine

YE-W series compression testing machine adopts computer to collect and display the test results. The complete testing process is hydraulically controlled. It can meet requirement of on line diagram function and test report creation.

YE-W2000D



YE-W3000

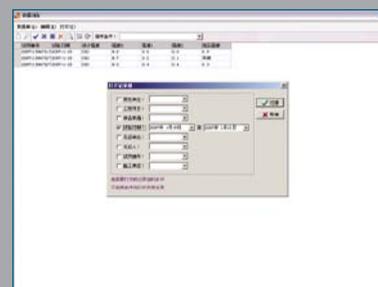


YE-W Series Computer Display Software

YE-W series test software is designed to meet most of the compression test requirements; Integrated software pack include many specific test method for compression such as: flexure test of concrete, compression test of cement, compression test of sand slurry block, compression test of bricks and compression test of rocks. Software is based on Windows OS and easy to operate.



Main interface



Database management



Test report customization

Main Technical Specifications:

Specification	YE-W300	YE-W600	YE-W1000	YE-W2000D	YE-W2000B	YE-W3000A	YE-W5000F	YE-W10000F
Max test load (kN)	300	600	1000	2000	2000	3000	5000	10000
Load range	4%-100% of max test load							
Accuracy of load	≤ ± 1%							
Dimension of compression plate (mm)	up φ150	204 × 204	320 × 320	250 × 250	φ300	400 × 400	800 × 600	480 × 480
	down φ160							
Compression space (mm)	250	0-500	0-500	0-500	0-420	0-1000	0-1500	300-4000
Piston stroke (mm)	150	0-200	150	150	100	200	200	250
Clearance of columns (mm)	280	425	460	540	368 × 318	560	670 × 870	1220 × 1270
Weight of mainframe (kg)	1500	1800	2500	3500	1470	5500	14000	48500
Power(kw)	2	2	2.6	3	1.5	7	8.5	25

YE-S Series Digital Display Direct Compression Testing Machine

Features:

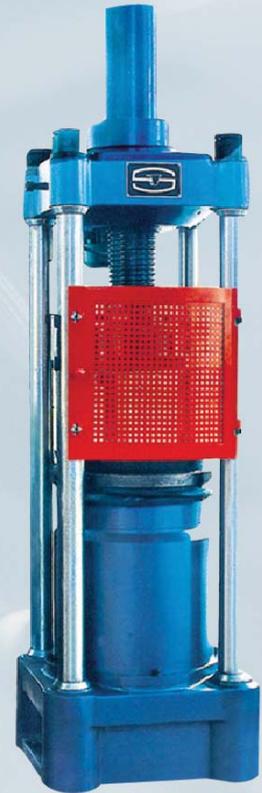
- ◆ Stepless control and full digital measurement
- ◆ Loading speed constant control
- ◆ Additional LCD control screen, friendly interface and easy to operate
- ◆ Easy calibration functions
- ◆ International test units switch: KN, MPa, KN/s, MPa/s
- ◆ Printer communication port, RS232 type
- ◆ Average test results calculation

YE-S1000



YE-S5000F

YE-S2000C



TIME-SHIJIN Digital Controller

- A. Load
- B. Peak value
- C. Load speed
- D. LCD display
- E. Emergency stop
- F. Operate panel
- G. Indication light

Main Technical Specifications:

Specification	YE-S300	YE-S600	YE-S1000	YE-S2000D	YE-S2000	YE-S3000A	YE-S5000F	YE-S10000F
Max test load (kN)	300	600	1000	2000	2000	3000	5000	10000
Load range	4%-100% of max test load							
Accuracy of load	≤ ± 1%							
Dimension of compression plate (mm)	up ϕ 150 down ϕ 160	204 × 204	320 × 320	250 × 250	ϕ 300	400 × 400	800 × 600	480 × 480
Compression space (mm)	250	0-500	0-500	0-500	0-420	0-1000	0-1500	300-4000
Piston stroke (mm)	150	0-200	150	150	100	200	200	250
Clearance of columns (mm)	280	425	460	540	368 × 318	560	670 × 870	1220 × 1270
Weight of mainframe (kg)	1500	1800	2500	3500	1470	5500	14000	48500
Power (kw)	2	2	2.6	3	1.5	7	8.5	25

Application:

This testing machine is mainly used to test compression strength of building material just like concrete, cement and brick. It is designed and produced as per British Standard <Testing Concrete part 115. Specification for compression testing machines for concrete BS 1881: Part115> and some relative norms.

The machine adopts loading hydraulically with accurate and reliable test data. In order to guarantee the accuracy of test load readout, it adopts oil pressure transducer to measure the load, after amplifying, the test load, peak value and loading speed can be displayed digitally. The oil source is installed at the bottom of control cabinet in which there is a double-flow high-pressure piston pump driven by the motor. The hydraulic loading system is controlled manually by the hydraulic valve with the functions of easy operation, safety and reliability. Further more, we adopt a hand wheel to adjust the testing space before the test. In this way, the specimen can be touched by the Sphere base upper plate easily.



JYS-2000A

Specification:

Item	Specification
Max. Load	2000 kN
Load range	80 - 2000 kN
Load display accuracy	1%
Loading speed	0.1 - 99.9 kN/s
Distance between two compression Plate	80-330mm
Piston stroke	20mm
Size of upper and lower platen	220 mm × 220 mm
Clearance between the columns	300 × 200mm
Power of motor for oil pumping	0.75 kW
Dimensions	855 × 380 × 1435mm
Weight	1000kg

Main Applications:

This kind of testing machine is used for the torsion test for all kinds of materials, by imposing a torque.

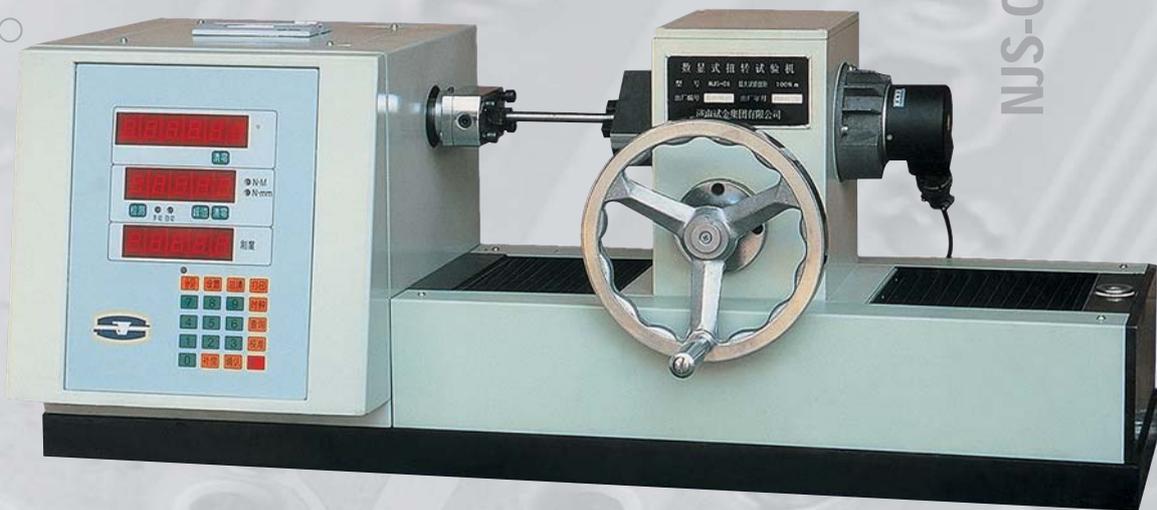
There are two testing methods:

Automatic testing: Turn the hand wheel until the test rod breaks. The testing machine will automatically test the yield torque M1 and the maximum torque M2.

Manual testing: choose the test angles and torques of any 9 points during the testing period and record them.

Able to retrieve or print latest testing results after the test.

It is mainly suitable for materials labs of scientific research department, colleges or universities and industrial enterprises to test the mechanical properties of materials under torsion condition.



NJS-02

Main Technical Specifications:

Item Names	Specifications
Max. test torque (N.m)	200
Min. reading of torque (N.m)	0.02
Torque measurement range (N.m)	20-200
Max. reading of torsion angle (°)	9999.95
Min. reading of torsion angle (°)	0.5
Relative error of torque indications	≤ ± 1.0%
Relative repeatability error of torque indications	≤ 1.0%
Diameter of specimen (mm)	10
Max. testing space (mm)	255
Working voltage (V)	AC, 220V ± 10%

Main Applications:

This testing machine uses computer-controlled Japanese AC servo system and is loaded through the active clamping head driven by the AC servo motor and cycloidal pinwheel reduction motor. The torque and torsion angle are measured with high-precision torque transducer and photoelectric encoder. Computer will dynamically display the test torsion curve, loading speed, peak value, and so on.

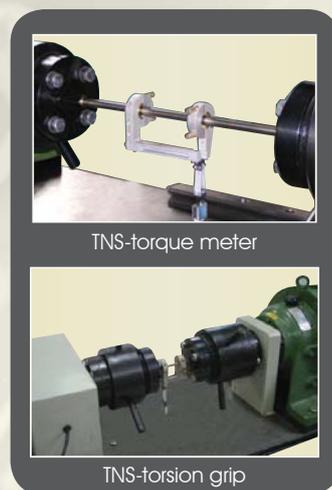
It is mainly used for the torsion test of metal and non-metal materials, as well as the torsion test for parts and components.

It is an essential instrument to measure torsion properties of materials for mechanics laboratories of aviation industry, construction industry, scientific research dept., universities or industrial enterprises.

Main Functions and Features:

Loading mode: use imported AC servo motor and driver; testing of torque and torsion angle: high-precision symmetrical torque transducer for torque testing and high-precision LEC model photoelectric encoder for angle testing; Operation: manual control and computer control; use WINDOWS-based supervision software to calculate mechanical indexes of materials. Auto process test data, dynamically display testing curve, store and print the testing results.

Operator can intervene in the analysis process and thus improve the analyzing accuracy.



TNS-DW

Main Technical Specifications:

Item names	Specifications
Max. test torque (N.m)	500/1000/2000Nm
Relative error of torque indications	$\leq \pm 1\%$ (from 20% of each full range)
Relative repeatability error of torque indications	$\leq 1\%$ (from 20% of each full range)
Loading speed	1 ° / min - 360 ° / min
Max. reading of torsion angle (°)	9999.9
Distance between two clamping heads	0-500mm

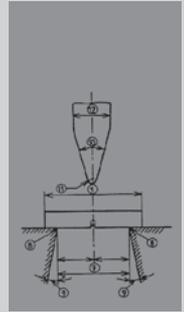
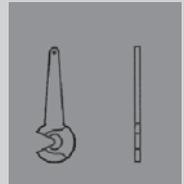
JB Series Metal Materials Charpy Impact Testing Machine

Main Functions:

It mainly used to determine the anti-impact capability of ferrous metal materials with high toughness, especially for steel and iron and their alloy, under dynamic load.

This machine can be operated semi-automatically. The pendulum of the machine can be raised or released automatically. Be applicable for continuing testing in different kinds of laboratories and other metallurgy industrial manufactories.

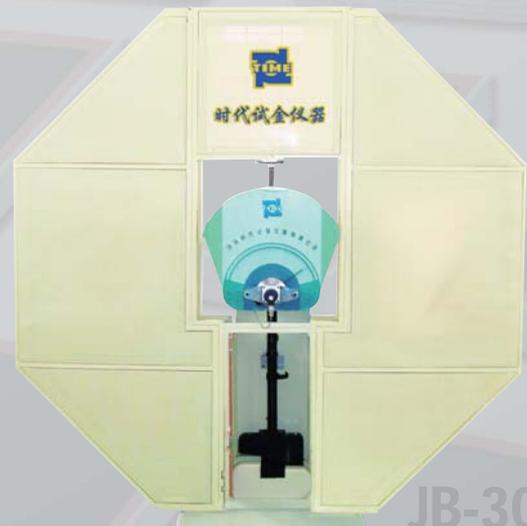
It is designed and developed according to standard of ISO148-2-1998, ASTM-E23-98 and GB/T 3808-22-002.



Charpy pendulum



JB-500B



Full protection net, Optional accessory

JB-300C

Main Technical Specifications:

Specification	JB-300B	JB-500B
Impact energy	300J 150J	500J 250J
Impact velocity	5.2m/s	5.4m/s
Raising angle	150 °	150 °
Standard span	40mm	40mm
Round angle radius of grips	R1-1.5mm	R1-1.5mm
Round angle radius of striking edge	R2-2.5mm	R2-2.5mm
Power supply	3 Phase, 380V, 50Hz, 180W	3 Phase, 380V, 50Hz, 200W
Dimension (mm)	2124 × 600 × 1340	2124 × 600 × 1340
Net weight	450kg	750kg
Size of specimen	10mm × 10mm × 55mm (U,V 2mm Notches)	

JB-xxC series has only one pendulum with the standard accessory.

JB Series optional Configuration:

JB-W Series

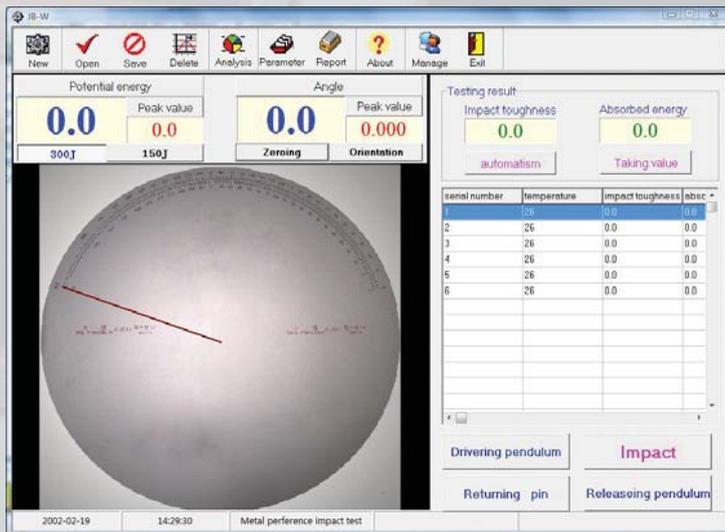


Computer controlled with complete software pack

JB-S Series



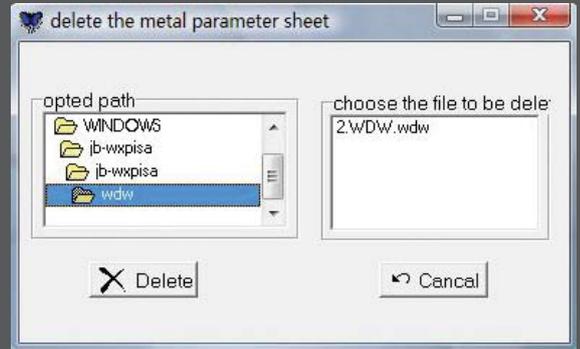
Optional digital control BOX



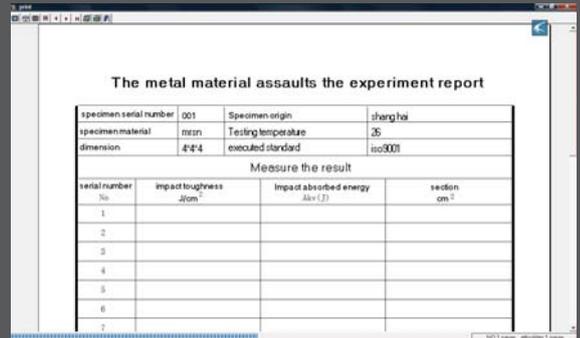
Main software interface, display all the function in same screen

Experiment report			
Serial number	1	Specimen origin	shang hai
Specimen material	msn	Testing temperature	26
Dimension	4*4*4	Executed standard	iso9001
Measure the result			
Sample NO.	NO.	Absorbed Energy	Impact toughness
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

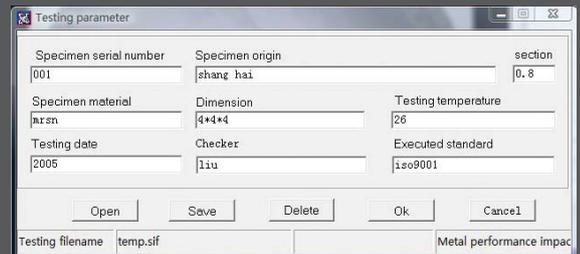
Customize test report with EXCEL edit. Create the most attractive test report for your own.



Information select interface, save or delete information



Test report creation, make one simple test report with only one click



Test report management, input or change test report information to suit requirements



Pass word lock the machine important information, only authorized user can make configuration of machine

XJ Series Non Metal Materials IZOD / Charpy Impact Testing Machine

Main Functions:

XJU Series pendulum Impact testing machine is used to test or determine the anti-impact capacity of non-metal materials, such as hard plastic, enhanced nylon, ceramic, toughened glass and dielectric etc. Be adopted by scientific research institutes, colleges, universities and many non-metallic materials manufactures and laboratories.

This machine is developed according to the standard of ISO180-82 or ASTM D256. Also, it has advantages of simple in structure, easy to operate and high accuracy.

Specifications:

Model	XJU-2.75	XJU-22
Impact energy	1J 2.75J	5.5J 11J 22J
Impact velocity	3.5m/s	3.5m/s
Rising angle	160 °	160 °
Impact semidiameter	0.322m	0.322m
Pendulum moment	PL(1J)=0.5155N-m PL(2.75J)=1.4177N-m	PL(5.5J)=2.8355N-m PL(11J)=5.6710N-m PL(22J) =11.3419N-m
Distance between striking edge to upper surface of clamps	22mm	22mm



XJU-2.75

Main Functions:

XJJ-5 / XJJ-50 Pendulum Impact testing machine is used to test or determine the anti-impact capacity of non-metal materials, such as hard plastic, enhanced nylon, ceramic, toughened glass and dielectric etc. Be adopted by scientific research institutes, colleges, universities and many non-metallic materials manufactures and laboratories.

This machine is developed according to the standard of ISO180. Also, it has advantages of simple in structure, easy to operate and high accuracy.

Specifications:

Model	XJJ-5	XJJ-50
Impact velocity	2.9 m/s	3.8 m/s
Pendulum energy	0.5J 1J 2J 4J 5J	7.5J 15J 25J 50J
Rising angle	160 °	160 °
Distance between centers of pendulum and specimen	380mm	380mm
Pendulum moment	0.5J PL=0.258Nm 1J PL=0.516Nm 2J PL=1.031Nm 4J PL=2.062Nm 5J PL=2.578Nm	7.5J PL=3.866Nm 15J PL=7.733Nm 25J PL=12.889Nm 50J PL=25.777Nm
Dial scale	0-0.5J minimum scale: 0.005J 0-1J minimum scale: 0.01J 0-2J minimum scale: 0.02J 0-4J minimum scale: 0.04J 0-5J minimum scale: 0.05J	0-7.5J minimum scale: 0.075J 0-15J minimum scale: 0.15J 0-25J minimum scale: 0.25J 0-50J minimum scale: 0.5J
Corner dimension of striking edge	30 degree	30 degree
Round angle radius of striking edge	R=2mm	R=2mm
Specimen	conform to ISO180	conform to ISO180



XJJ-50

XJJ-5

Main Application:

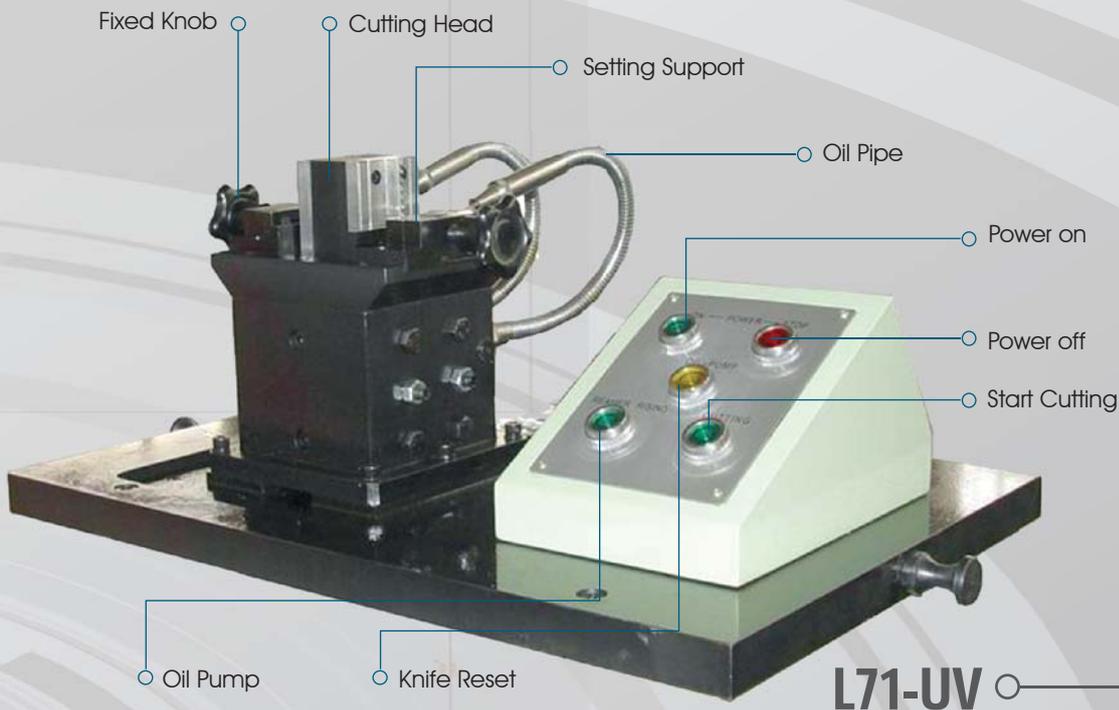
This machine is mainly used to make U or V shape notches on impact test samples. The machine can cut this notch with only one stroke of the cutting knife. Easy and fast, be suitable for preparing the samples under continuously impact test in metal laboratory, inspection department and other facilities.



LS71-UV Manual Broaching Machine



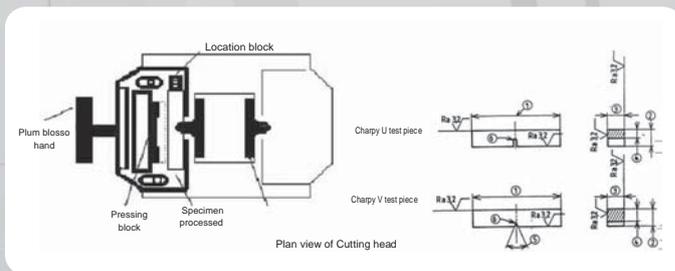
L71-UV Electrical Broaching Machine



L71-UV

Specifications:

L71-UV (automatic) / LS71-UV (Manual) sample preparation machine for 2mm UV notches



QK-20

Specifications:

Sample preparation Machine QK-20
Cutting Knife(S):
A: $45 \pm 1^\circ$ R: =0.25
A: $45 \pm 1^\circ$ R: =1
C: 2 ± 0.1

Sample:

Conform to ISO179 / ISO180
For plastic sample use

XT-50

Projection Screen

Standard Executed:

XT-50 is optical equipment which is used for inspecting the quality of the UV notches and meets the requirement of customers and the International Standard during an impact test of metals. According to optical projection, XT-50 can magnify the outline of UV notch on specimen 50 times and project it on the screen. We can compare the projection to the standard to check that whether the UV specimen is eligible. It is very easy to operate.

Main specification:

Dia. of projection		180mm
Dim. of Platform	Square	110 × 125mm
	Round diameter	90mm
Stroke	Vertical	± 10mm
	Horizon	± 10mm
	Up and down	± 12mm
Magnify rate		50 ×
Objective magnify rate		2.5 ×
Project objective magnify rate		20 ×
Optic supply		12v 100w
Power		220v 50Hz 1ph
Dimension		515 × 224 × 603mm
Weight		18kg approx.



XT-50

DWC-60A Low Temperature Chamber For Impact Specimen

Main application:

DWC-60A low temperature chamber is designed according to the requirements in Test Method of Charpy impact tests for metals. It has the features of non chemical pollution, low noise, compact in dimension, easy operate and high accurate of temperature control. It is the ideal equipment for low temperature impact test for metals. Beside, this machine is applicable for other tests and inspection which require the low temperature condition.

Main specification:

Power supply		380V 50Hz 3ph 2.2KW
Temperature range		Room temperature to -60
Chamber dimension		120 × 120 × 120mm
Temperature descent speed		to -60 less than 90 min
Control accuracy		+/- 1.5
Display method		LED digital display
Water source		Required
Dimension	Chamber	300 × 300 × 400mm
	Control cabinet	450 × 500 × 750mm



DWC-60A

Standard Executed:

QC/T211-1996 <Test method for light alloyed wheel of Motorcycle and Portable Motorcycle>

QC/T212-1996 <Aluminium alloy Integrated wheel Universal technique condition of Motorcycle and Portable Motorcycle>

Main application:

It is mainly used to do rolling bend fatigue testing of Motorcycle or Light Motorcycle.

It adopts electric measure, stepless adjusting test speed, fast and effectively installing grips. It is provided with output to computer to realize extended function.

Main test items:

(1)Test bend torque; (2) Test force; (3)Speed of tested wheel;(4) Accumulative test ileage; (5)Accumulative test revolving number

Main structure:

(1) Load frame; (2) Computer control Unit; (3) Strong electricity control Unit; (4)Test Grips;

(1) Load Frame:

It adopts floor welding structure design, conveniently install specimen, revolving drive power adopts excitation speed-

adjusting motor to realize stepless adjusting speed. The surface, which installs specimen, is safely protected by safety cover.

Bend loading approach adopts step motor driving. Load is measured by load cell.

Centering mechanism on the bottom of main shaft realizes fast roughly centering.

Jumping mechanism of main shaft measure precisely centering condition by displacement sensor, and check the bending condition of main shaft in testing process at the same time, to realize emergency stop function when wheel was destroyed by fatigue.

(2)Computer control Unit:

Configured with industry control computer, A/D convert integrated card board inside computer completes signal amplifying and signal module converting.

PComputer software is supported by WINDOWS, with the function of dynamic display, saving, output test report, etc.

(3) Strong electricity control Unit:

Strong electricity controller completes to drive centering motor and control emergency stop.

○ PQW-800



Main specification:

Max. bend torque	800Nm
Max. test force	1200N
Resolution	± 1% of 20%FSϕ Static stateϕ
Basic length of arm	670mm ± 0.25mm
Range of rotation	100-800 r/min
Diameter of tested wheel	ϕ125-ϕ590mm (After tyred)
Power of motor	4.2KW

PJW-10 Computer Controlled Light Alloy Wheel Radial Load Fatigue Testing Machine

Standard Executed:

QC/T211-1996 <Test method for light alloyed wheel of Motorcycle and Portable Motorcycle>

QC/T212-1996 <Aluminium alloy Integrated wheel Universal technique condition of Motorcycle and Portable Motorcycle>

Main test items:

(1) Test force; (2) Revolving speed of drum; (3) Accumulative test mileage

Main structure:

(1) Load frame; (2) Computer control Unit; (3) Strong electricity control Unit; (4) Accumulative test numbers;

Test Grips:

(1) Load Frame:

It adopts floor welding structure design, horizontal load frame loading, big drum adopts international standard design, diameter 1707mm, imitate vividly road condition, excitation speed-adjusting motor drive drum to realize stepless adjusting speed, and test under different driving speed. Loading bracket uses lower damp linear component driving. Panasonic servo

motor drive closed loop control. Load is measured by load cell. To realize closed loop control to fatigue test and emergency stop function when wheel was destroyed by fatigue.

(2) Computer control Unit:

Configured with industry control computer, A/D convert integrated card board inside computer completes signal amplifying and signal module converting.

Computer software is supported by WINDOWS, with the function of dynamic display, saving, output test report, etc.

(3) Strong electricity control Unit:

Strong electricity controller completes to drum driving motor and control emergency stop.

Main application:

It is mainly used to complete torsion fatigue test and inspection to light alloy wheel of Motorcycle or Light Motorcycle. It adopts electric measure, stepless adjusting test frequency, digital display test parameters. It is provided with output to computer to realize extended function.



PJW-10

Main specification:

Max. test force	10KN
Resolution	± 1% of 20%FS (Static state)
Diameter of wheel frame	1707 ± 0.25mm
Range of speed adjusting of wheel frame	80-400 r/min
Diameter of tested wheel	φ260-φ770mm (After tyred)
Power of motor	22KW

PNW-1400 Computer Controlled Light Alloy Wheel Torsion Fatigue Testing Machine

Standard Executed:

QC/T211-1996 <Test method for light alloyed wheel of Motorcycle and Portable Motorcycle>

QC/T212-1996 <Aluminium alloy Integrated wheel Universal technique condition of Motorcycle and Portable Motorcycle>

Main test items:

(1) Test force; (2) Test torque; (3) Test frequency ; (4) Accumulative test numbers;

Main structure:

(1) Load frame; (2) Computer control Unit; (3) Strong electricity control Unit; (4) Test Grips;

(1) Load Frame:

It adopts floor welding structure design. Excitation speed-adjusting motor drives revolving of wheel. Specialized design elastic clamping device complete the rigid clamping to wheel. Torque clamp down device adopts stepless adjusting speed device. Step motor driving, Loading by lever, to complete the

clamp down to wheel torque. Load test is completed by load cell.

(2) Computer control Unit:

Configured with industry control computer, A/D convert integrated card board inside computer completes signal amplifying and signal module converting.

Computer software is supported by WINDOWS, with the function of dynamic display, saving, output test report, etc.

(3) Strong electricity control Unit:

Strong electricity controller completes to drive motor.

Main application:

It is mainly used to complete torsion fatigue test and inspection to light alloy wheel of Motorcycle or Light Motorcycle. It adopts electric measure, stepless adjusting test frequency, digital display test parameters. It is provided with output to computer to realize extended function.



PNW-1400

Main specification:

Max.torque	1400 Nm
Max.load	2000N
Resolution	± 1% of 20%FS
The arm of force	4kW
Frequency	0.5HZ
Accuracy	± 1%
Diameter of tested wheel	φ125-φ550mm
Power of motor	4KW
Meet the test requirements of brake drum	φ50, φ110, φ120, φ130, φ160

JLS-700 Light Alloy Wheel Radial Impact Testing Machine

Standard Executed:

QC/T211-1996 <Test method for light alloyed wheel of Motorcycle and Portable Motorcycle>

QC/T212-1996 <Aluminium alloy Integrated wheel Universal technique condition of Motorcycle and Portable Motorcycle>

GB/T6147-92 < Requirement to packing, packing sign, transportation technique of testing machine>

Main application:

It is composed of load frame, measuring parameters displayed Unit, Strong electricity control Unit, Test bracket, etc.

The load frame use double columns structure. The motor is up setting. The impact pendulum is taking to requested height by steel wire. The height is collected by photoelectric coder. Twice display the height value which can be read directly to assure the accuracy and reliability of test data.

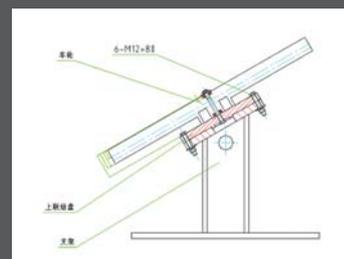
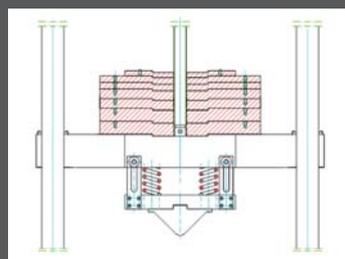
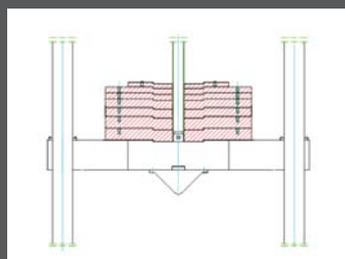
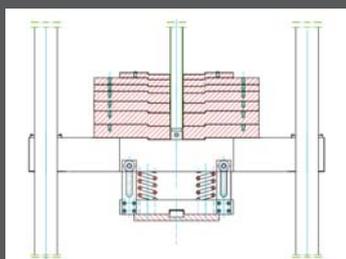
The release of impact pendulum adopts pneumatic control, and setting safety pin.

Impact pendulum is self-locking in normal condition. When air pressure meets requirement, instantly release by manually control the button on control box to complete impact, the device is safe and reliable.

Impact pendulum equipped with twice impact device to realize twice impact towheel.

Strong electricity control Unit drives motor and pneumatic parts.

Safety cover guarantees the safe of operator.



Main specification:

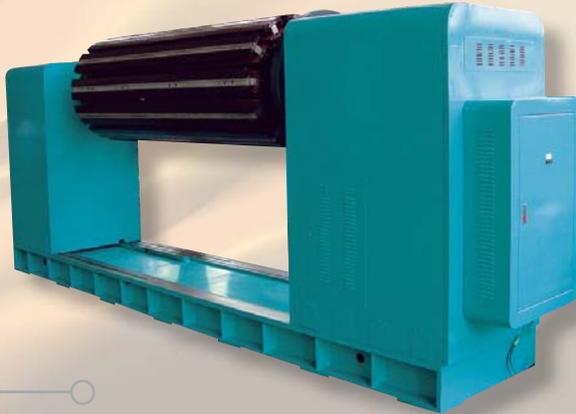
Weight of main Pendulum	350kg
Weight of secondary Pendulum	40kg
Width of head of pendulum	not less than 200mm
Max.displacement of pendulum	not less than 250mm
Stiffness of spring	300 ± 10kgf/cm
Outer diameter of wheel	φ260-φ770mm
Power of motor	1kW
Digital display quality of pendulum and height of impact	
Pressure of air source	0 - 0.7Mpa

Main application:

This machine is used for winding tasks of transformer loops and is widely used in many transformer manufactories.

Features:

- Beautiful appearance and high load bear capacity
- Stable starting speed and efficient break speed
- Reliable operation and easy to control
- Big torque force and low noise
- Adjustable winding mould for optional choice. (maximum length: 5000mm)



Main Technical Specifications:

Specification	RX-1	RX-2	RX-3	RX-5	RX-10	RX-20	RX-30
Max load bear (kG)	1000	2000	3000	5000	10000	20000	30000
Motor power (kW)	3-5.5	4	5.5	7.5	15	22	30
Centre height (mm)	800	1100	1100	1400	1400	1600-2000	1600-2000
Centre length (mm)	1200	1500	1800	2000	2000	2500	2500-4000
Rotation speed (r/min)	0-150	0-60	0-60	0-30	0-15	0-10	0-10

Other Machine We Manufacture



XRL-400A melt flow index tester



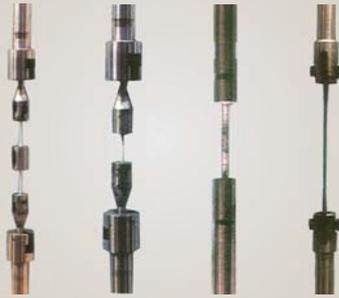
XGNB-W pipe explosive pressure testing machine



XGNB-W pipe explosive pressure seal fixture



RDRC-1130 High temperature creep testing machine



High temperature creep testing machine fixture 1-4



LC-300B falling arrow impact testing machine



JZ-200A automatic liquid surface tonometer



XRW-S300 VICAT Softening Temperature tester



AQM safety cap impact testing machine



WDH series customized test space universal testing machine



TNS-EZ3 Torsion Testing Machine



TNS-EZ10 Torsion Testing Machine