

MATERIAL TESTING MACHINES & INSTRUMENTS



Laryee Technology Co., Ltd



www.laryee.com



Enterprise Introduction

Laryee technology was founded in Beijing the beautiful city of china, which engage in research, development and distribute laboratory, testing and anglicizing instruments. We can provide customers with excellent Testing Machines, Hardness Testers, Temperature Chambers and other supporting instruments in laboratory and industry.

The experience combined with modern technologies, and strict quality control make it possible to supply high quality products, which are also well known for the competitive price thanks to the low production cost in China.

Aim at meeting the demands of customers from many countries., we make use of the technology and products of famous manufacturers in China and other countries to provide scientific, reasonable and practical projects and products, and professional services.

We can provide products with competitive price, good quality and excellent services. We can also provide comprehensive after-sale services, such as installation, debugging, technical training, maintenance, etc. As a result, we have made good relationship with many customers such as Asia, European and America markets. And we are highly praised by the customers.

Laryee Technology Co., Ltd wishes to collaborate with person-ages in this trade and create glorious future together.

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WDS Series Digital Display Electronic Universal Testing Machine



WDS-1,2,5



WDS-10 , WDS-20

Function

WDS series are suitable for tensile, compression, bending ,cutting shearing and tearing test of rubber, peeling and tearing, plastic, electrical wire and cable, composite, profiled bar, waterproof roll, etc. They are essential testing instruments for quality testing section, university and college, research institution and industrial and mining enterprise. It conforms to ISO 75001, ASTM A370, ASTM E4 ASTM E8 and JIS, DIN, BSEN testing standards.

Features

This machine equips alternating servo motor for driving crossbeam and imported photoelectric encoder for displacement measure. The controller adopts flush type monolithic computer structure and is equipped multitask operating system and built-in powerful test control software, which includes the test system with measuring, controlling, calculating and saving functions. This machine has the following performances: Automatically calculating stress, elongation rate, tensile strength and modulus of elasticity; automatically preserving all of 16 groups testing data; automatically recording the value of external vertex, breakpoint, appointed value of force and elongation; testing result can be scanned by pages and printed; the third class purview management; Real-time electronic clock and automatically recording the testing date and time.

Specification

Model	WDS-1	WDS-2	WDS-5	WDS-10	WDS-20
Measuring range of testing force (kn)	0.02~1	0.04~2	0.1~5	0.2~10	0.4~20
Accuracy of testing force	≤±1% of indicated value;				
Resolution of crosshead displacement Measurement	0.01 mm				
Speed range of crossbeam	0.01 mm/min~500 mm/min, step less speed regulation and arbitrary setting				
Effective testing space (mm)	800				
Power supply	380V±10%, 50H				
Working environment	10°C~30°C, relative humidity ≤ 80%				
Main configuration	Panasonic servo motor and speed adjustment system, precision photoelectric encoder, CELTRON load cell				
Overall dimension of host machine (mm)	600×420×1700			740×500×1680	
Weight(kg)	300			450	

WDW Series Computer Controlled Electronic Universal Testing Machine



WDW-1, 2, 5



WDW-10, WDW-20

Function

This series testing machines are suitable for tensile, compression, bending, shearing, peeling and tearing test of metal and nonmetal materials, such as rubber, plastic, electrical wire and cable, composite, profiled bar, bar metal, board, spring, components and so on. It conforms to ISO 75001, ASTM A370, ASTM E4, ASTM E8 and JIS, DIN, BSEN testing standards. AD800 in this machine is whole digit multi center closed loop measuring and control system. It adequately absorbs advanced functional characteristics and integrates the latest international professionally developed measuring and control system. Control software can automatically finger 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, stress-strain.

These curves automatically switch. Testing process control and data processing conform to the requirements of International standards. This machine is beautiful, multifunctional, safe and easy.

Specification

Model	WDW-1	WDW-2	WDW-5	WDW-10	WDW-20
Measuring range of testing force (kN)	0.01~1	0.02~2	0.05~5	0.1~10	0.2~20
Accuracy of testing force	±1% of indicated value				
Resolution of testing force	1/200000 of maximum testing force				
Relative error of displacement	±0.5%				
Resolution of crosshead displacement Measurement	0.01 mm				
Speed range of crossbeam	0.001 ~ 500 mm/min, step less speed regulation and arbitrary setting				
Valid testing space (mm)	800				
Power supply	380V±10%, 50H				
Working environment	10°C ~ 30°C, relative humidity ≤ 80%				
Main configuration	Panasonic servo motor and speed adjustment system, precision photoelectric encoder, CELTRON load cell				
Overall dimension of host machine (mm)	600×420×1700			740×500×1680	
Weight(kg)	300			450	

WDW Series Computer Controlled Electronic Universal Testing Machine



WDW-50, 100, 200

Specification

Model		WDW-50	WDW-100	WDW-200
Maximum force		50KN	100KN	200KN
Measuring range of testing force (kN)		0.2%--100%FS		
Accuracy of testing force		≤±1% (0.5% as special order)		
Resolution of force		1/200000 of maximum force and no subsection of all scale		
Accuracy of displacement measure		±0.5%		
Resolution of displacement measure		0.03μm		
Maximum value of displacement (mm)		0.001		
Adjusting range of displacement speed		0.001-500mm/min		
Accuracy of deformation measure		≤±0.5%		
Range of deformation measure		2%~100% FS		
Speed controlling accuracy of displacement		≤±1.0% of the set value (speed < 0.01 mm/min) ≤±0.2% of the set value (speed ≥ 0.01mm/min)		
Speed adjusting range of force		0.005-5% FS		
Speed controlling accuracy of force		≤±2.0% of the set value (speed < 0.05%FS/S) ≤±0.5% of the set value (speed ≥ 0.05%FS/S)		
Speed adjusting range of deformation		0.005-5% FS		
Speed controlling accuracy of deformation		≤±2.0% of the set value (speed < 0.05%FS/S) ≤±0.5% of the set value (speed ≥ 0.05%FS/S)		
Speed adjusting range of constant displacement, force and deformation		0.5%-100% FS		
Speed controlling accuracy of constant displacement, force and deformation		≤±0.1% (set value ≥ 10%FS) ≤±1% (set value < 10%FS)		
Effective tension testing space (mm)		650	650	600
Compression testing space (mm)		650	650	650
Width of testing space (mm)		560	560	600
Clamping sample (mm)	Thickness of flat specimen	0~14	0~14	0~20
	Clamping diameter of round specimen	φ4~φ22	φ4~φ22	φ9~φ26
Power supply		380V±10%, 50Hz		
Working environment		10℃~30℃, relative humidity ≤80%		
Main configuration		Panasonic servo motor and speed adjustment system, Precision photoelectric encoder.CELTRON load cell		
Weight (kg)		1100	1100	1200

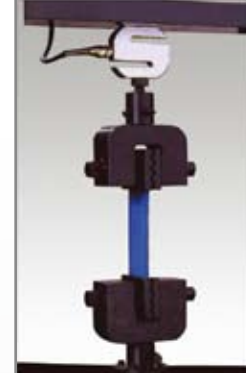
Accessories



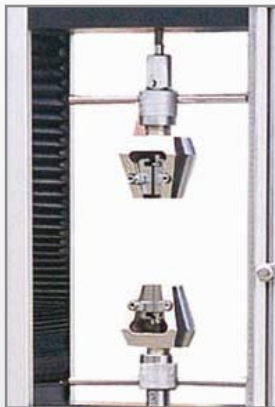
Bending Test Jig



Compression Jig



Opposite Clamping Grip



Wedgy Tension Grip



Film & Paper Tension Grip



Shearing Test



Adhesive Tape Tension Attachment



Dumbbell Tension



Spring Compression

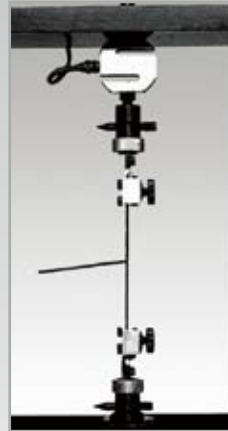
Accessories



Peeling Test



Hard Steel Wire Tension



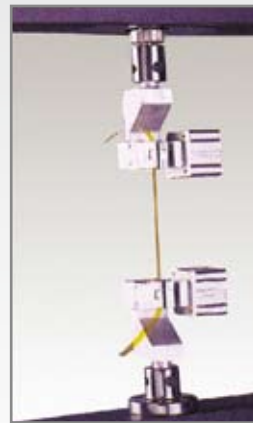
Film Tear Test



Puncture Attachment



Soft Steel Wire Tension



Pneumatic Tension Grips



Silk & Thread Tension Grip



Extensometer



Load Calibrator

WE Series Dial Display Hydraulic Universal Testing Machine



WE-A	Hydraulic cylinder overhead type
WE-B	Hydraulic cylinder underneath type; Displacement of chain
WE	Hydraulic cylinder underneath type; Displacement of beams

Function

This series machines are mainly designed for tension, compression, bending and shearing test of metal materials and meet with the norms of ISO 7500 "Metallic materials-Tensile testing at room temperature". This machine is also used for compression and bending test of nonmetal materials, such as cement, concrete and so on. Equipped with special auxiliaries, it can be used for mechanical property testing of fastener, wire rope and components. They are ideal testing instrument for project quality testing section, university and college, research institution and industrial and mining enterprise.

Features

1. This machine adopts oil cylinder overhead (underneath) type structure, hydraulic load, hydraulic or manually clamping specimen.
2. The frame is separated with dynamometer, connected by high-pressure hydraulic pipe and wire, avoiding the influence of dynamometer degree when the specimen is breaking, which makes the value accurate.
3. Testing force indicator dial adopts closed type, which makes scale clear.
4. Loading speed indicator makes operation more convenient. It has three kinds speed: 0.4 R/min, 0.8R/min and 2R/min.
5. Automatic tracer is installed upright of dynamometer shell and can magnify the straining original shape by 2 or 4 times according to the requirements of test.

WE Series Specification

Specification	WE-100A	WE-100B	WE-300A	WE-300	WE-300B	WE-600A	WE-600	WE-600B	WE-1000A	WE-1000	WE-1000B		
Maximum force (kN)	100	100	300	300	300	600	600	600	1000	1000	1000		
Measuring range and minimum scale	0-20kN	0.05kN/scl.	0-60kN	0.2kN/scl.	0-120kN	0.4kN/scl.	0-200kN	0.5kN/scl.	0-200kN	0.5kN/scl.	0-200kN		
	0-50kN	0.1kN/scl.	0-150kN	1kN/scl.	0-300kN	1kN/scl.	0-500kN	1kN/scl.	0-500kN	1kN/scl.	0-500kN		
	0-100kN	0.2kN/scl.	0-300kN	1.5kN/scl.	0-600kN	2kN/scl.	0-1000kN	2kN/scl.	0-1000kN	2kN/scl.	0-1000kN		
Accuracy of testing force	±1% of indicated value												
Deformation zoom factor of tracing device	2: 1 or 4: 1												
Clamping diameter for round specimen (mm)	φ6-φ22		φ10-φ32			φ13-φ40			φ13-φ60		φ13-φ60	φ14-φ45	
Clamping Thickness of flat specimen (mm)	0-15		0-15			0-30			0-40		0-40		
Maximum clamping width of flat specimen	40		70			70			70		75		
	550		750			800			800		690		
Testing space (mm)	270		500			270			550			620	
	550		750			800			800		690		
Compression plate (mm)	φ100		φ130			φ180			φ180		φ170×170		
	30-600		30-580			30-1000			30-580		100-500		
Distance of bending support (mm)	30-400		30-580			30-1000			30-1000		30-1000		
	250		150			250			250		150		
Piston stroke (mm)	250		250			250			250		150		
Power supply	380V±10%, 50Hz												
Working environment	10°C~30°C, relative humidity≤80%												
Overall dimension (L×W×H) (mm)	850×565×2400 (A Model)		900×600×2550 (A Model)			1120×900×3010(A Model)			1260×900×4000 (A Model)		1260×900×4000 (A Model)		
	730×500×2000 (B Model)		900×730×2570			900×730×2330			980×650×2220 (B Model)		980×650×2220 (B Model)		
Dynamometer	1070×810×1730												
Weight (kg)	1440	1370	2740	2720	2000	3040	3020	2500	4340	4120	3300		

WEW Series Computer Display Hydraulic Universal Testing Machine



WEW-100A

WEW-300

WEW-A Hydraulic cylinder overhead type
 WEW-B Hydraulic cylinder underneath type; Displacement of chain
 WEW Hydraulic cylinder underneath type; Displacement of beams

Features

1. Machine frame consults foreign technique. It has compact structure and a rational layout, significantly reduces the overall height comparing the hydraulic cylinder overhead. The machine owns hydraulic pressure sensor, which is with strong ability and long-life. Adjust the test space by turbine structure of mobile beam does not need rotate of screw when adjusting test space compacting the transmitting of chain. It makes complete separation between transmitting and positioning system, ensures the up and down jaws coaxial and the mainframe durable. Unique structure of screw gap eliminating can guarantee the continuity of the load test.
2. Independent hydraulic clamping structure can guarantee the reliability of the system; it will not hurt person for falling and ensure the safety of test personnel.
3. Limit switch and electrical protection system which is durable protection, can ensure the security of using.
4. Test data uses Access database system, which is powerful and convenient.
5. Save data interface can connect with the network directly and share resources

WEW Series Specification

Specification	WEW-100A	WEW-100B	WEW-300A	WEW-300	WEW-300B	WEW-600A	WEW-600	WEW-600B	WEW-1000A	WEW-1000	WEW-1000B	
Maximum force (kN)	100	100	300	300		600	600		1000	1000		
Measuring range of force (kN)	2-100		6-300			12-600			20-1000			
Accuracy of testing force	±1% of indicated value											
Scales of testing force	1, 2, 5, 10											
Accuracy of deformation	±0.5%F.S											
Clamping diameter for round specimen (mm)	φ6-φ22		φ10-φ32			φ13-φ40			φ13-φ60			
Clamping Thickness of flat specimen (mm)	0-15		0-15			0-30			0-40			
Maximum clamping width of flat specimen	40		70			70			75			
Testing space (mm)	tension	550	550	750	620	550	800	690	700	650	620	
	compression	270	500	650	550	300	700	620	750	600	580	
Compression Plate (mm)	φ100		φ130			φ180			φ180			
Distance of bending Support (mm)	30-600	30-400	30-1000	30-580	100-320	30-1000	30-580	100-500	30-1000	30-800	100-500	
	250											
Piston stroke (mm)	250											
Power supply	380V±10%, 50Hz											
Working environment	10°C~30°C, relative humidity≤80%											
Overall dimension (L×W×H) (mm)	Frame	850×565×2400 (A Model)	900×600×2550 (A Model)	1120×900×3010(A Model)	1260×900×4000 (A Model)	905×580×2260	905×580×2325	905×580×2260	905×580×2325	1070×850×2530	1070×850×2530	
		730×500×2000 (B Model)	800×500×1950 (B Model)	800×500×1950 (B Model)	950×630×2265(B Model)	950×630×2265(B Model)	800×500×1950 (B Model)	800×500×1950 (B Model)	950×630×2265(B Model)	980×650×2220 (B Model)	980×650×2220 (B Model)	
Control system	1070×810×1730											
Weight kg		1440	1370	2740	2720	2000	3040	3020	2500	4340	4120	3300

WAW Series Computer Control Electro-Hydraulic Servo Universal Testing Machine



Function

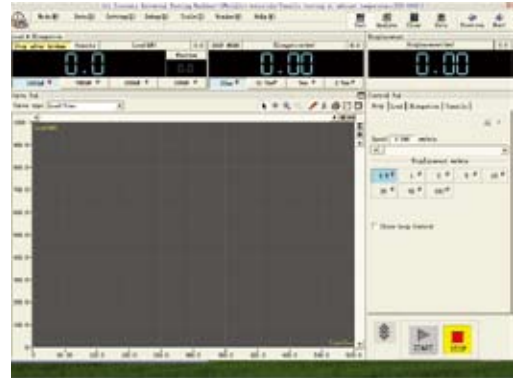
This series machines are widely used for tension, compression, bending and shearing test of metal materials and also used for compression and bending test of nonmetal materials, such as cement, concrete and so on. Equipped with simple auxiliaries, it can be used for mechanical property testing of fastener, wire rope and components. They are perfect testing instrument project quality testing section, universities and colleges, research institution and industrial and mining enterprise. The machine is designed and made according to ISO7500, ASTM A370, ASTM E4, ASTM E8 and BSEN standards.

Model		WAW-100	WAW-300	WAW-600	WAW-1000
Maximum force(KN)		100	300	600	1000
Measuring range of force(KN)		2% -100%			
Accuracy		≤±1% of indicated value			
Resolution of displacement measure		0.01mm			
Accuracy of deformation measure		≤±0.5% FS			
Control range of presser speed		1-60 MPa/S			
Speed adjusting range of testing stress		1N/mm ² S~60N/mm ² S			
Speed adjusting range of testing strain		0.00025/S-0.0025/S			
Control range of displacement speed		0.5mm/min-50mm/min			
Clamping diameter for round specimen(mm)		φ6-φ22	φ10-φ32	φ13-φ40	φ13-φ60
Clamping thickness of flat specimen (mm)		0-15	0-15	0-30	0-40
Clamping width of flat specimen (mm)		40	70	70	120
Testing space	Tension(mm)	550	750	800	650
	Compression (mm)	500	650	700	600
Compression Plate		φ100	φ130	φ180	210 x210
Distance of bending support (mm)		30~400mm	30~580 mm	30~580 mm	30~800 mm
Maximum piston stroke (mm)		250			
Working environment		Room temperature 10℃~30℃, relative humidity≤80%			
Overall dimension (mm)	Frame	720×560×1860	905×580×2260	905×580×2325	1070×850×2530
	Control system	600×600×1165	600×600×1165	600×600×1165	600×600×1165
Weight (kg)		1350	2700	3000	4100

Control Software MaxTest for WDW, WEW and WAW UTM

The MaxTest program applies to all kinds of material testing machine such as Electronic Control Universal Testing Machine WDW, Servo control hydraulic Universal Testing Machine WAW, Computer display hydraulic Universal Testing Machine, according to different configuration files.

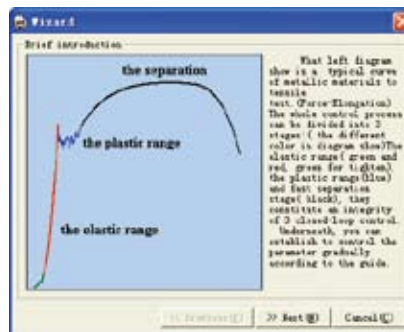
The control mode contains constant force, constant displacement, constant deformation and others. The testing process can show the curve force-displacement, force-time force- deformation curves test curves, and can automatically switch at any time, easy to observe and compare. The test process control and data processing fully consistent with the corresponding metal materials and non-metallic materials national standards. Automatic strike tensile strength; yield strength, tensile strength and elastic modulus, the proportion of non-extension strength $R_p 0.2$ and other conventional data the test process control and data processing materials in full compliance with the corresponding international standards ISO, ASTM, BSEN and etc.



- The software is supported by multiple load cell and extensometer.
- Using database structure, users can add the definition of projects by their own requirement, also edit reporting format.
- Data inquiry module: the user can quickly find test data they need from the thousands of available test data through variety of filter conditions;
- Debugging tools box-configuring program: open it, then can change the configuration parameters of system;
- Batch processing program: one batch curves of specimen can be compared and the results can be statistical;
- Report processing program: MaxTest.DOC, MaxTest.EXL and high-defined report, can make the user edit the format statements.
- Overload protection: if the load is $\geq 2\% \sim 10\%$ of rated value, the machine will stop automatically.
- Reserved data interface can be directly connected to the integrated management network of laboratory.



DSP Control card



Software Wizard



Test Report

Testing Machine Upgrading and Frame Supply Service

Laryee Technology, as professional product and service in testing field, we can supply our customer many testing machine upgrading proposal. After we check the system in users, we can change the control and driving system to Digital or computer control type in using our load cell, photoelectric encoder, extensometer, motor system, DSP control card and software.

Our aimed testing machine system as follows:

Digital control Electronic motor testing machine as our WDS series
 Computer control electronic motor testing machine as our WDW series
 Digital control hydraulic testing machine
 Computer display hydraulic testing machine as our WEW series
 Computer control servo hydraulic testing machine as our WAW series



PCI DSP card



Digital unit



Hydraulic servo valve



Load Cell



Encoder



Pressure sensor

Besides our control system, we also supply our testing machine frame to customer, they also can add their selves control system and OEM our frame.

YES Series Digital Display Hydraulic Compression Testing Machine



YES-300



YES-2000A



YES-3000

Function

Used for test the compression resistant strength test for building materials, such as brick, cement, concrete specimen and component, etc. Equipped with specials auxiliaries, it can be used for bending resistant test of building materials and compression resistant test of red bricks. They are perfect testing instrument for building project detection department, quality testing section, university and college, research institution and industrial and mining enterprise.

Characters

1. Machine frame is distyle type, which makes the conformation compact and arrangement reasonable.
2. Manually controlling compression load is easy and convenient.
3. Mechanic limit pistons protection assures the safety of testing.
4. Setup overload protection which can stop automatically, when the load exceeds the maximum by 2-5%.
5. Data acquisition system adopts advanced CMOS chip integrated technology, real time displays force and force peak value. So the machine is accurate and stable.
6. Display loading rates, so the manual load is more homogeneous and accurate.
7. Reserved data interface can connect with network directly, realizing resource sharing.

Note:

YES-1000 and YES-2000 have two types A and B. A type is manual adjusting testing space and B type is electric adjusting testing space. YES-3000 has good overload protection: Stop automatically when the testing machine force exceeds 2%-5% of the maximum.

Specification

Specifications		YES-300	YES-600	YES-1000	YES-2000
Measuring range of force (kN)		12~300	24~600	40~1000	80~2000
Accuracy of testing force		±1%			
Scales of force		1、2、5			
Upper plate size (mm)		Φ125	Φ180	Φ220	Φ300
Lower plate size (mm)		175×175	250×250	Φ220	Φ300
Distance between two plates (mm)		250	255	300	500
Width of testing space (mm)		280	340	580	580
Maximum piston stroke (mm)		120	150	200	200
Shape of machine		Double column		Large space, Double column	
Power supply		380V±10%, 50Hz			
Working environment		10℃~30℃, relative humidity≤80%			
Overall dimension (mm)	Frame	950×650×1405	1120×660×1650	910×580×1800	910×580×1940
	HPC	—	—	600×600×1020	600×600×1020
Weight (kg)		700	800	3000	3200

Digital Display Building Material Hydraulic Compression Testing Machine

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.

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.

Specification

Max. Load: 2000KN
 Load range: 80 - 2000KN
 Load display accuracy: 1%
 Loading speed: 0.1 - 99.9kN/s
 Distance between upper and lower platen: 320 mm
 Piston stroke: 0 - 20mm
 Diameter of Piston: Φ250mm
 Size of upper and lower platen: Φ300 mm
 Power of motor for oil pumping: 0.75 kW
 Noise: ≤70Db
 Max Oil pressure: 40 Mpa
 Dimensions: 890 x 450 x 1340mm
 Net Weight: 750 kG



NJS Torsion Testing Machine

The test machine is doing reverse test of materials by reversing deformation in two directions. It can choose to record the angle of 9 points freely during the test process and can inquiries and print the test results after the test.

Specification

- 1、 Maximum torque of test(Nm): 200 ;
- 2、 Minimum of reading torque(Nm): 0.05;
- 3、 Minimum of reading torsion angle:9999.9°;
- 4、 Minimum of reading torsion angle: 0.1°;
- 5、 Relative error of torque:≤±1.0% ;
- 6、 Repetitive relative error of torque:≤±1.0%;
- 7、 Diameter of sample(mm):Φ10;
- 8、 Maximum test space of axis(mm): 260;
- 9、 Voltage:220V±10%。



NDW Computer Controlled Torsion Testing Machine

The loading system of this machine, controlled by computer, rotates load through alternating servo motor and cycloidal gear reducer. Torque and twist angle detection uses the high-precision torque sensor and a photoelectric encoder; computer displays dynamically the curve of test torsion angle and torque, rate of loading, peak of power and so on.

Specification

- 1、 Maximum torque of test(Nm):500、 1000、 2000;
- 2、 Relative error of torque:≤±1%;
- 3、 Range of torsion angle measure:0~9999.9°;
- 4、 Relative error of torsion angle:≤±1%;
- 5、 Display of torsion angle: Minimum resolution 0.1°;
- 6、 Diameter of clamping sample(mm):φ6~φ20mm;
- 7、 Maximum distance between two collets(mm):≥500;
- 8、 Angle of twist in small-angle measurement: Minimum of resolution 0.0001°;
- 9、 Range of reverse speed:0~540°/min, Variable speed;
- 10、 Precision of speed:±1%;
- 11、 Direction of test rotation: Bidirectional;
- 12、 Power supply: 220V±10%, 50Hz



NDX Metal Wire Torsion Testing Machine

The series of test machine mainly used to test the capacity of bearing deformation of the metal wires and other wire ropes whose diameter are φ6~φ20mm during the reversing. The test can show the surface defects of wire during the test process.



Specification

Specification	NDX—3	NDX—10
Range of specimen diameter (mm)	Φ1—Φ3	Φ3—Φ10
Test speed	60、 90、 120	30、 60
Length of camping wire (mm)	100—300	300-500
Maximum reading rotation circle	999.9, The number of test circle blockades automatically after specimen fracturing	

Metal Charpy Impact Testing machine



JB-300B



JBS-300



The machine can be used for the determination of anti-impact performance of metal materials when it is under dynamic loading, thus judged the quality of materials under dynamic loading. It is applicable for the laboratory, which does continuous compact tests, metallurgy, machinery manufacturing, and other industries.

The machine with the semi-automatic control, operates easily and efficiently. It uses the electric control the knife of impact to raise, impact and fall. Moreover, the machine can use the remaining energy to raise and fall to prepare the next test automatically after thrusting specimens.

It is designed and developed according to standard of ISO148-2-1998, ASTM-E23-98

Specification

Impact energy (J): 150、300;
 Impact speed: 5.2m/s;
 Raising angle of pendulum:150°;
 Standard span (mm):40;
 Round angle radius of Grips:R1.0~1.5mm;
 Round angle radius of striking edge:R2.0~2.5mm;
 Pendulum Pole length (mm):750;
 Dimension of Specimen(mm):10×10×55; (U,V)
 V specimen: 10mm x 10mm x 55mm (2mm)
 U specimen: 10mm x 10mm x 55mm (2mm)
 Power supply: 3 Phase, 380V±10%, 50Hz ;
 Overall dimension(L×W×H) (mm) :2124×600×340;
 Weight: 450kg



JBW-300

Note: JB-300B Semiautomatic Model JBS-300 Digital Model JBW-300 Computer controlled

Non-metal Charpy Impact Testing Machine

This machine is suitable for the impact toughness test of nonmetal materials including rigid plastics, strengthened nylon, glass fiber reinforced plastic, electrical insulating materials, etc.



XJJ-5



XJJ-50



XJU-2.75 XJU-22

Specification	XJJ-5	XJJ-50
Impact speed (m/s)	2.9	3.8
Impact energy (J)	0.5、1、2、4、5	7.5、15、25、50;
Moment of impacting pendulum (Nm)	Pd0.5=0.2679 Pd1.0=0.5358 Pd2.0=1.0718 Pd4.0=2.14359 Pd5.0=2.6794	Pd7.5=4.0192 Pd15=8.0385 Pd25=13.397 Pd50=26.795
Raising angle of pendulum:	150°	150°
Impact center distance (mm)	230	395
Span of support (mm)	40、60、62、70、95	40、60、70、95

Non-metal IZOD Impact Testing Machine

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. Being 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. Also, it has advantages of simple in structure, easy to operate and high accuracy.

Specification

Specification	XJU-2.75	XJU-22
Impact velocity	3.5m/s	
Impact energy	1J, 2.75J	1.5.5J 11J 22J
Rising angle	160°	
Impact semi diameter	0.322m	
Pendulum moment	1J PL=0.5155Nm; 2.75J PL=1.4177Nm	5.5J PL=2.8355Nm; 11J PL=5.671Nm; 22J PL=11.3419Nm
Dial's scale	0-1J Min. scale: 0.01J 0-2.75J Min. scale: 0.025J	0-5.5J Min. scale: 0.05J 0-11J Min. scale: 0.1J 0-22J Min. scale: 0.2J
Distance between striking edge to upper surface of clamps	22mm	
Round angle radius of striking edge	R=0.8mm	
Specimen	conform to ISO180-82	



Digital Impact XJUS

XJL-15 Dropping Hammer Impact Testing Machine

This series machine is mainly used to test the impacting strength of plastic profile in low temperature.

Specification

- 1、 Maximum impacting energy: 15J;
- 2、 Maximum impacting height: 1500mm±2mm;
- 3、 Radium of hammer: 25mm ±0.25mm
- 4、 Weight of hammer: 1000g±5g;
- 5、 Support span of specimen: 200mm;
- 6、 Dropping hammer bouncing lock rate: 100%
- 7、 Levelness of worktable: $\leq 1/1000$



XJL-300 Dropping Hammer Impact Testing Machine

This series machine is widely used for the external loads impact strength test of plastic tubular materials and tubular components, and also suitable for the external loads impact strength test of plastic board and profile. It is ideal instrument for quality in construction industry, manufacture, chemical industry and university.

Character

1. This machine adopts manual and automatic work module and the operation is convenient and easy.
2. PLC controller and LCD human-machine interface realize overall process of test automatic control.
3. Automatically adjust the zero point of the specimen.
4. The device of avoiding second impact makes the testing result more accurate.
5. Auto protection and auto prompting improve the safety and reliability of test.
6. The lower space can be electrically adjusted, and test specimens automatically, which improves the accuracy of specimen position, reduces the intensity of labor and improves efficiency of work.

Specification

- 1、 Maximum impact energy:300J;
- 2、 Maximum impact height:2000mm±5mm;
- 3、 Weight of hammerhead(kg):0.5, 0.8, 1.0, 1.25, 1.6, 2.0, 2.5, 3.2, 4.0, 5.0, 6.3, 8.0, 10.0, 12.5, 16.0, error±0.5%;
- 4、 Model of hammerhead:d25、 d90 ;
- 5、 Diameter of pipe specimen:10~400mm (The range can be increased according to the requirements of customers).
- 6、 Power supply: 220V±10%;
- 7、 Temperature of working environment:10 ~30 ; relative humidity:≤80%;
- 8、 Overall dimension of host machine (L×W×H)(mm):850×750×3600;
- 9、 Weight:600kg



Rockwell Hardness Tester

HR-150A Rockwell Hardness Tester A popular handle model, Used to test ferrous and nonferrous metal in workshop and measurement department.

HRS-150 Digital Rockwell Hardness Tester Used to measure ferrous metal, nonferrous metals and nonmetal materials.; Micro computer controlled and has inner pinter.

HRMS-45 Superficial Rockwell Hardness Tester Used to measure ferrous, nonferrous metals, hard metals, carburized or nitrided layers and other chemical treating layers and thin pieces.

HR-150DT Motorized Rockwell Hardness Tester Used to measure hard metal, carburizing steels, quenching steels, casting irons, mild steels, A1-alloys, Cu-alloys and malleable irons

HRM-45DT Motorized Superficial Rockwell Hardness Tester Used to test hard metals, carburized, nitrided layers, and other chemical treating layers, also used to test thinner pieces hardness.

XHR-150 Plastics Rockwell Hardness Tester Used to test plastics, hard rubbers, fricative materials, synthetics resins, bearing metals, Al-alloys, Sn- alloys hard papers.



HR-150A



HRS-150



HRMS-45



HR-150DT HRM-45Dt XHR-150



HRSS-150

Specification	HR-150A	HRS-150	HRMS-45	HR-150DT	HRM-45DT	XHR-150
Preliminary test force (N)	98		29.4	98	29.4	98
Total test force (N)	558,980,1471		147,294,441	558,980,1471	147,294,441	558,980,1471
Total test force dwell time		1-30s	1-30s	0-30s		
Hardness Indication	Dial	Digital	Digital	Dial	Dial	Dial
Power Supply	Manually	AC220V ±5% 50/60HZ				
Specimens Max.Height	170mm					
Dimension (DXWXH) (mm)	510x212x700	510x212x730	510x210x730	510x212x700		
Weight (kg)	85	85	80	85	80	85

HRSS-150 Digital Rockwell Superficial Rockwell Hardness Tester

It has big screen to display, Brinell, Rockwell and Vickers for contrast. It has a lot of function such as keeping the increase and decrease of time, data dispose, storage, pick up, print and RS-232 computer output as well.

Suitable range: HRA.B.C.D.E.F.G.H.K and HR15N.T; 30N.T; 45N.T(scale).

According to standard of GB/T230.3-2002 and consults ISO6508-2:1999 international standard.

Used to measure the hardness of hard metals, carbon steels, quenching steels, hard cast irons, mild steels, A1, Cu and malleable irons and used to test all kinds of Rockwell and Superficial Rockwell.

Specification

Preliminary test force: 29.4M(3kg), 98.07N(10kg)

Total test force: 147.1N(15kg), 294.2N(30kg), 441.3N(45kg), 588.4N(60kg), 980.7N(100kg), 471N(150kg)

Test force folding time: 0-60S(can adjust)

Test force loading and releasing method: Automatic

Display method: Back light LCD screen Data dispose: CPU

Sample Max Size: Working table to indenter 180mm, indenter center to the arm 160mm

Dimension (L*W*H): (551*260*800)mm

Net weight: 67Kg Power supply: AC220V±5% 50-60Hz

Brinell Hardness Tester

HBE-3000A Brinell Hardness Tester used to test ferrous metals, non-ferrous metals. It clear load weight and adopts electronic automatic load system. Has ten force steps , extensive test range and high precision.

HBS-3000 Digital Brinell Hardness Tester used for testing ferrous metal and non-ferrous metal. The tester adopts electronic auto loading, computer software programming, high power optical measurement, photo sensor systems. Operational procession and test result can be displayed on LTD and test result can be printed.

Specification

Total test force Brinell hardness test: 612.5N, 980N, 1225N, 1837.5N, 2450N, 4900N, 7350N, 9800N, 14700N, 29400N
 Hardness measuring area:8-650 HBW (Hard metals steel ball)
 Magnification of microscope :20x
 Max. height of specimens: 200mm
 Max. depth of specimens:135mm
 Dimensions (DxWxH): 236x550x753mm
 Power supply: AC220V 50/60Hz
 Net weight: 123kg



HBE-3000A



HBS-3000

HBRVU-187.5 Brinell, Rockwell & Vickers Hardness Tester
 It used to measure the hardness of ferrous, non-ferrous metals, hard metals, carburized layers and chemical treating layers.

Specification

Preliminary test force: 98
 Rockwell hardness tester(N): 588, 980, 1471
 Brinell hardness test (N): 306,613,1839
 Vickers hardness test (N): 294,588,980
 Magnification of Microscope: 37.5X 75X
 Max. height of specimens (mm): 200
 Distance from Indenter's center to OuterWall:200mm
 Machine Size (DXWXH) (mm): 560x260x767
 Power Supply: AC220V/50HZ AC110V/60Hz
 Weight (kg): 90



HBRVU-187.5 HD₉-45

HD₉-45 Superficial Rockwell & Vickers Optical Hardness Tester

It serves to measure the hardness of ferrous, non-ferrous metals, hard metals, carburized or nitrided layers, and other chemical treating layers. It is also used to for the hardness test of thin pieces.

Specification

Preliminary test force:29.4
 Vickers hardness test (N): 49,98,196,294
 Magnification of Microscope: 75X, 150X
 Max. height of specimens (mm):200
 Distance from Indenter's center to OuterWall:200mm
 Machine Size (DXWXH) (mm): 560x260x767
 Power Supply: AC220V/50HZ AC110V/60Hz
 Weight (kg): 85

Vickers Hardness Tester

HV-30 Vickers Hardness Tester

Automatic loading and releasing mechanism; Adjustment of lighting source via hardware; Adjustment of pressure holding time (0 ~30s); Unique measurement conversion device and unique micro eyepiece one-time measurement readout device, ensuring easy use and high accuracy;

The tester is specially designed for testing minute, thin samples or parts after surface coating or general mechanical part. For research institutes, factories labs and QC departments, this is an ideal hardness testing instrument for research or measuring purposes.

Specification

Testing force: 19.6N(2Kgf),29.4N(3Kgf),49.0N(5Kgf) 98.0N(10Kgf),196N(20Kgf),294N(30Kgf)

Hardness Value Symbol: Error Range in Display

HV2、HV3、HV5、HV10、HV20、 ±3.0%

HV30 ±2.0%

Hardness Value Range In Measure 10HV2~2500HV30

Pressure Loading & Unloading method: Automatic

Magnification of Microscope: 100X

Pressure Holding Time: 0~30s(5 second as input increment)

Minimum Measurable Unit: 1µm

Maximum Height of Sample: 150mm

Distance from Indenter's Center to Outer Wall: 130mm

Main Body Weight: approx. 38Kg

Power Source: AC220V/50HZ AC110V/60HZ

Machine Size (L×W×H): (452×200×620) mm

Vickers Hardness Tester: HV-50 HV-10

Digital Vickers Hardness Tester: HVS-50 HVS-10



Vickers Hardness Tester: HV-50 HV-10
Digital Vickers Hardness Tester: HVS-50 HVS-10

Specification	HV-10	HVS-10	HV-50	HVS-50
Test Load	N(kgf)		N(kgf)	
	2.94 (0.3)		9.8(1.0)	
	4.9 (0.5)		49 (5.0)	
	9.8 (1.0)		98 (10.0)	
	29.4 (3.0)		196 (20.0)	
	49 (5.0)		294 (30.0)	
	98 (10.0)		490 (50.0)	
Loading mechanism	Automatic loading and releasing method			
Load applying speed	0.16~0.19mm/sec			
D well time	5~60sec			
Magnification of Microscope	Measuring 200 ^x ; Objective 100 ^x		For measuring 100x	
Max. measuring length	0.25mm		0.65	
Min. measuring unit	0.5um	0.0625	1um	0.25um
Max. Height of specimen	160mm			
Distance from Indenter's center to outer wall	135mm			
Test range	8HV0.3-2500HV10		5HV1-2500HV50	
Brightness of indentation	Provided			
Machine Size (L×W×H)	(540×270×650)mm			
Main Body Weight	35kg		45kg	
Power Supply	AC220V/50HZ		AC110V/60HZ	



Micro Hardness Tester

HV-1000 and HVS-1000 Micro Hardness Tester have two object lens; one for measurement(40x) and the other for observation(100x). And employ a turret switching system, an indenting position can be accurately determined. As they have two optical paths respectively, you can fix a photographic device onto the upper part of the tester, a clear picture of impress can be taken at any time.

MHV2000 Digital Micro Hardness Tester adopt computer software programming, high-power optical measuring system, and photo-electric sensor technique, etc, through soft keys input, it is able to regulate and measure the strength of light source, to select Vickers and Knoop test method, to maintain time, file No. And storage, etc., and to provide the conversion table of various hardness number for reference. In LCD large screen display, it can display testing method, testing force and measuring indentation length, hardness value, dwell time of testing force, measuring times, and can key in year, month & date, testing result and data processing, etc. to be outputted through printer.

The hardness tester can be equipped with camera device, it can take photos of tested indentation and material metallographic composition. We named this model with DM-2003 video measuring device as MHV-2000S



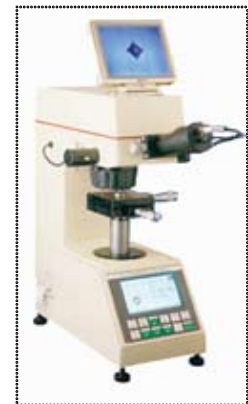
HV-1000



HVS-1000



MHV-2000



MHV-2000S

Specification		HVS-1000	HV-1000	MHV-2000
Test Load (N)		0.098, 0.246, 0.49, 0.98, 1.96, 2.94, 4.90, 9.80N (10gf~1000gf)		
Loading mechanism		Automatic load and unload		
Microscope Magnification		For measurement: 40 ^x (Object lens 40 ^x , eyepiece 10 ^x) For observation: 100 ^x (object lens 10 ^x , eyepiece 10 ^x)		
Load holding time		5-60 second		0-60s
microscope	Max. length	150um		
	Min. graduation	0.0625um	0.5um	0.0625um
Max. height of specimen		Approx 65mm		Approx 75mm
Max. depth of specimen		Approx 85mm		
Micro test table		Dimensions 100x100mm		Dimensions 100x100mm
Digital date display		5-2500HV		
Automatic recorder		Printer		Printer
Dimension		(L)405 X (W) 290X (H)480mm		(L×W×H): (441×270×480)mm
Weight		25kg		31kg
Power supply		AC220V AC110V		AC220V/50HZ

Aging Test Machine

This machine is used to take the aging test of rubber, plastic, paper and all sorts of insulated material. In the rubber and plastic industry, for example, the machine is resorted to accelerate the deterioration of vulcanizing rubber and to calculate the pull and the change rate of elongation after the test subject to deterioration under different temperature and for different time. In the paper industry, it is used to test the basis weight and the water ratio of the paper. It can also help research on the aging rules of rubber and plastic in natural environment. and offer quick identification of the aging capability of vulcanizing rubber so as to offer the basis of prolonging the service life of the rubber and plastic products. The machine conforms to various test standards, such as: GB, CNS, JIS, ASTM, ISO, IEC, UL and BS.



Aturtable set



2 piece of tables

Specification	M Model	L Model
Test space LxWxH(mm)	450X450X500	500x500x600
Exterior dimension LxWxH(mm)	830x560x980	1120x800x1380
Test temperature (RT°C)	RT~200°C	RT~200°C / 300°C
Time controller	0~24hr /appointed	0~24hr / appointed
Temperature controller	Electronic mode	Electronic mode
Electrochemical container (KW)	1.8	4.5
Power (V)	220V	220V
Max current (A)	25A	25A
Machine weight (kg)	70	100
Motor power (HP)	1/4x1、1/8x1	1/4x1、1/8x1
Test fittings	Dynamic test turntablex1 Captive test tablex2	Dynamic test turntablex1 Captive test tablex2

Other chamber



Relative Testing Instrument Collection



Extensometer Calibration



Surface Tensiometer



Digital Display Tensiometer



Partiale Harness Tester



Angle Strength
Testing Machine



Electronic Wood-based
Pannal Testing Machine



Wood-based Pannel
Universal Testing Machine



Spring&Tension
Compression Testling Machine



Hardness Block



Indenteter



Proving Ring



Laryee Technology Co., Ltd.

Tel: +86-10-83451847

Fax: +86-10-83552248

Email: info@laryee.com

Add: NO.9 Longquan Bystreet,
Xuanwu District, Beijing, China

PC: 100054

Website: www.laryee.com