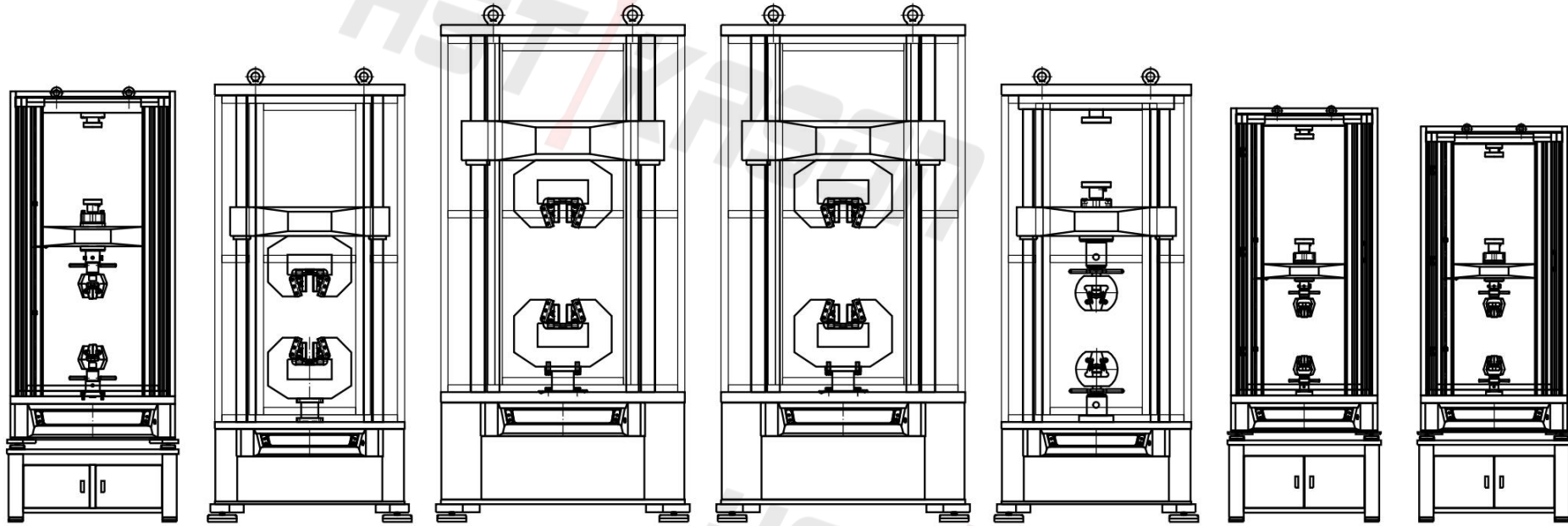


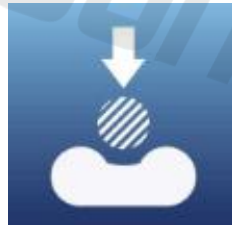
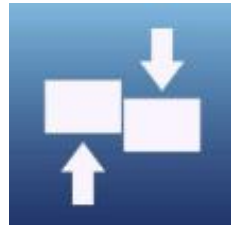
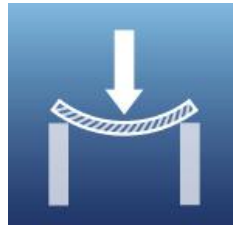
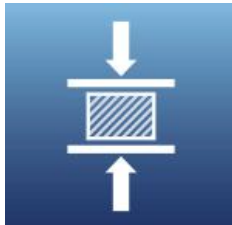


**200-600kN**  
Electronic Mechanical  
Universal Testing Machines

**HST** 济南恒思曼大仪器有限公司 提供最新材料试验机制造  
JINAN HENGSI MAN INSTRUMENT CO., LTD. HST/RES/200-600kN



*Diversified product series is available to almost all markets and industries around the world,  
Meet different customers*



# WDW Series

- Application

This series material testing machine product group was primarily developed for standardized tests on materials and components. Used in conjunction with the intuitive HKtest software.

Test Typical: wide range of tension, compression, bending, shearing and low cycle test. include metal, building components, rubber, plastic, spring, high strength steel (HSS), aerospace and automotive structures, screws, nuts, large fasteners, wood products etc.

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- Standards

ASTMA370, ASTM E4, ASTM E8, ASTM E9, ASTM D638, ASTM D882, ASTM D3039, ASTM D3479, ASTM E517, ASTM D695, ASTM D6641, ASTM D3410, ASTM D7791, ASTM D412, ISO6892, ISO527-3, ISO527-4, ISO7438, ISO7500-1, EN10002-4, GB/T228-2002, GB 16491-2008, HGT 3844-2008 QBT 11130-1991, GB13-22-1991, HGT 3849-2008, GB6349-1986, GB/T 1040.2-2006, ASTM C165, EN826, EN1606, EN12430 etc

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- Safety Device

Stroke protection: Machinery, computer double protection, prevent over preset; Force

protection: system setting

Emergency stop device: handling emergencies

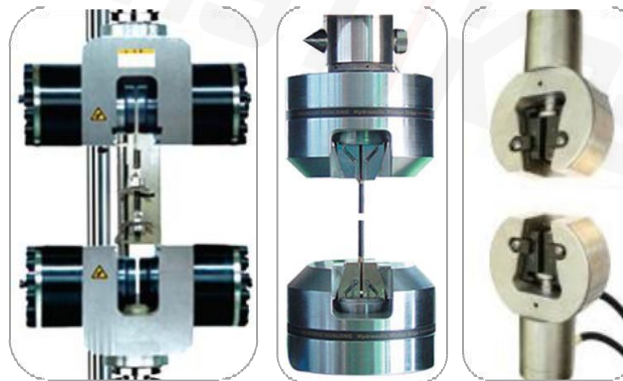




### Can display

Load, displacement, speed

Has the functions of test start, test stop, test zero clearing and so on



- 01 Compression Grip
- 02 Ruler
- 03 Load Sensor
- 04 All Side Fully Enclosed Cover
- 05 High-Strength Beam
- 06 Digital Display Hand Control Box and Fixed Seat
- 07 Coaxiality Adjustment Device
- 08 Tensile Grip
- 09 Spiral stretch Line
- 10 Power Indicator
- 11 Emergency Stop Switch
- 12 Power Start Switch
- 13 High Load-Bearing Rubber Shock Absorption and Leveling Horn

### T-slot Table



The grip can be changed according to the customer's material

Better performance, more cost-effective

**HST/KASON**



our machine



others

**PK**

Machine appearance comparison

## PRODUCT COMPARISON



PK



### Machine cover

All aluminum alloy surface special treatment, beautiful and generous, moisture-proof, rust-proof, long-term use without discoloration

### Machine cover

Iron plate spray paint, easy to rust, poor corrosion resistance, easy to change color, drop paint



PK



4 columns and 2 ball screws, high frame strength, good guidance, smooth operation of equipment, low noise

2 columns 2 ballscrews, frame is not rigid enough, the guide performance is poor, easy to deform, can't guarantee the test accuracy, big vibration, high noise



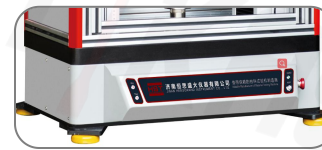
PK



### High stiffness middle beam

used to adjust the test space, the important stress position, coaxial adjustment device used to adjust the coaxiality of the upper and lower fixture and improve the fracture alignment of the specimen

The middle beam is thin, easy to bend and deform after force, and the rigidity is poor. Impact on service life No coaxiality adjustment device, sample fracture to neutral difference, affecting test accuracy



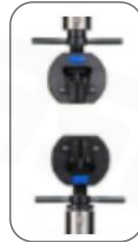
PK



Working table whole plate, high stiffness, low gravity, stable. High bearing capacity rubber shock absorber cushion levelling iron on base, adjusting the level of equipment, reduce the equipment vibration during the test process

The base is made of thin steel plate with poor stiffness, light weight at the bottom, high gravity, poor stability and no good shock absorber at the bottom

## PRODUCT COMPARISON



### Test Grip

Electroplating process is used to treat the surface with high brightness and corrosion resistance

### Test Grip

Blackening treatment, poor corrosion resistance



### USA sensor

Class 0.5, Conforms to EN 10002-2 Grade0.5, ISO75001-1 Class 0.5, BS 1610 Class 0.5, ASTM E4, and JIS B7721 Class 0.5

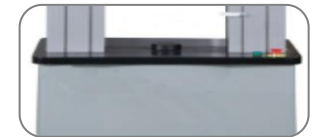
China sensor  
Class 1



**Installation of indicator ruler for real-time observation of the position of moving beam**

The limit switch adopts the built-in installation mode, the outside adopts the limit adjusting rod and the position locking knob, has the strong sensitivity. Safe and reliable.

No indicator ruler, unable to observe position of moving beam  
The external limit switch is fixed on the moving beam, and the line of the limit switch follows the moving beam. The line is easily damaged after bending, the sensor is easily damaged by impact. No position adjusting rod and limit adjusting locking device



The installation supporting cabinets designed according to human ergonomics, improves the overall control comfort of the equipment. The upper desktop is a high hardness solid psychological plate and the lower part is the high bearing rubber shock absorber leveling pad iron.

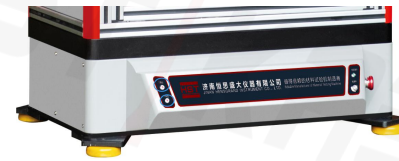
without

## Proprietary Technology



### External hand-held controller-- Our company

adopts 320 x 240 LED display, which can quickly adjust the test space. It also has the functions of test start, test stop, test zero clearing and so on. It can display the running state of the equipment in real time, test data, make the sample clamping more convenient and easy to operate.



### Limit indicator---our company

The mechanical touch device installed on the middle beam, after touching the electronic limit, the corresponding upper and lower limit indicator light will be on to prevent the equipment from overloading operation, sensor damage and so on, so as to protect the safety of the equipment operation.



### Safety and accessibility of electricity-our company

Add circuit breaker and computer, printer wiring board to change the line disorderly when using, make the line layout more clear, at the same time improves the safety of electricity use.

### Elastic PU spiral line -our company

The connecting wire of force sensor and external hand-held controller adopts high elastic spiral telescopic wire, which makes the line more beautiful and durable.



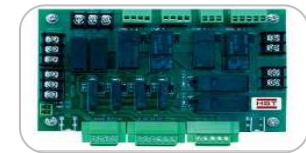
### External Independent Controller

Integrated measurement, control and transmission functions, And the signal acquisition, signal amplification, data transmission, servo motor drive unit is highly integrated; USB data transmission fully supports notebook computer, tablet computer, desktop computer



### Safety protection shield

Fully enclosed aluminum alloy shield , protection door with stainless steel lockin latch



### PCIE board card-Other Company

Unable to connect notebook and so on, data transmission is slow. It is easy has problem that cannot find the card, the card and the computer do not match and so on, the service life is short, to buy the controller and the special computer again after the loss of the host, which greatly increases the cost

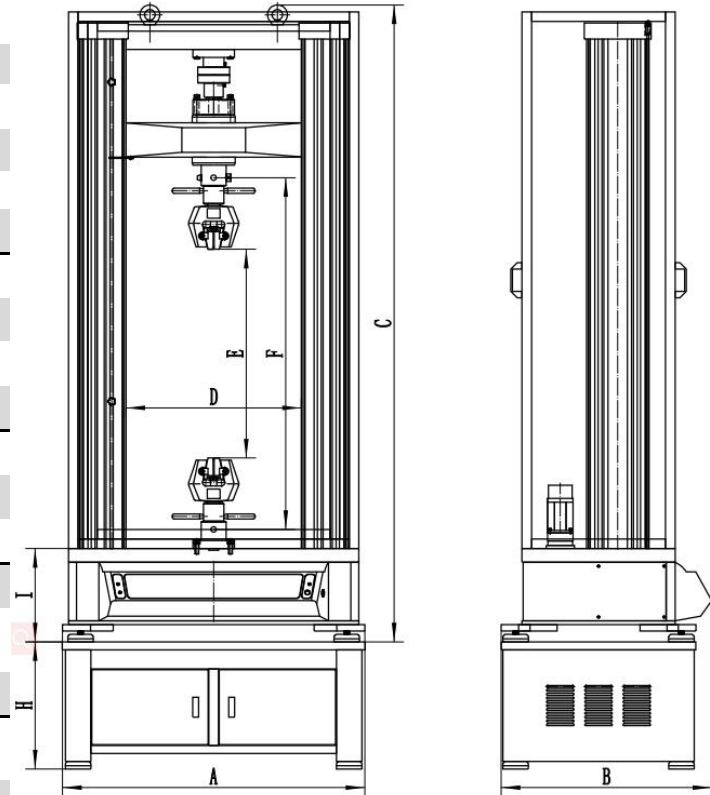
### Machine running drive system

Adopt 24 V low voltage control, used Japan Panasonic Company and Japan Omron Company and other international brand components, with electrical overcurrent, overload, limit indication and other protection functions,the equipment safe and reliable.



# Specifications

NO.	Items	Model	WDW-200E	WDW-300E	WDW-500E	WDW-600E
1	Host	Structure	4 column and 2 Ball Screw			
		Max. Load(kN)	200	300	500	600
		Tensile space(mm)	700	700	800	800
		Compression space(mm)	1100	1100	800	800
		Effective test width(mm)	600	600	700	700
		size(mm)	1102*870*2395		1450*1140*2730	
		Host Weight (kG)	2200		4000	
		Power Supply	380V/50-60Hz			
2	Control System	Controller	24 bit AD, external controller			
		communication mode	USB 2.0			
		Test software	HKTest			
		Hand control box	320x240 Display Sscreen , 8 key control			
3	Process Specifications	Servo motor	TAIWAN "TECO"			
		Speed(mm/min)	500		200	
		Displacement resolution				
4	Test Specifications	Load cell	USA ( max load ) : one can add more load cell			
		Load accuracy	Class 0.5, EN 10002-2 Grade0.5, ISO75001-1 Class 0.5, BS 1610 Class 0.5, ASTM E4, and JIS B7721 Class 0.5			
		Measuring range	0.4% ~ 100%			
5	Safety Protection	strong electric drive system	24V voltage control, with over current overloading protection function			
		Position limit switch	Upper and lower lights			
		Power	Power light,leak current protection device			
		Automatic protection	Overload 10%, automatic protection			
6	Other Configuration	Position limit protection	Hall switch			
		Equipment level adjusting device	φ160mm /φ185mm vibration-absorptive cushioning iron			
		Hand control box fixing device	Standard			



Load	A	B	C	D	E	F	H
20kN	850	585	1740	450	670	1000	450
50kN	850	585	1840	450	770	1100	450
100kN	950	660	2000	550	655	1100	400

Note:Extra wide and/or extra height frames are available.Power supply system is completely customizable.Tensile space, test width, and speed is completely customizable.

# Accessories

## Basic configuration



Tensile Grip  
600KN Hydraulic Grip  
200kN :Φ4-Φ20,0-20mm  
300kN :Φ6-Φ40,0-40mm  
600kN :Φ6-Φ60,0-60mm



Compression plate:  
Φ100mm



Standard :TECO  
Optional:  
Japan Panasonic



Hand-held controller  
Optional: DOLI  
RMC6 orRMC7



**USA Load Cell**



Controller:  
HKTEST  
Optional:  
DOLI EDC220



English operation  
softwareand CD



Cable connect with  
PC

## Extension configuration



Four-sided safety shield



bottom cabinet



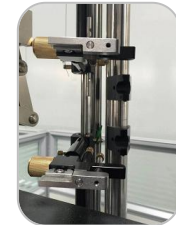
Computer



Printer



**Extensometer YYU**  
seriesGauge length:100,  
50,  
25deformation:5,10,25mm



**Long travel**  
extensometerModel DBX-  
800For textiles, plastics and  
rubbers etc.



**USA Epsilon**  
High Temperature  
ExtensometersTemperatur  
e Range: 1200 °C



**USA Epsilon**  
Extensometer  
Model 3542



**MF automatic**  
extensometer-MFL-  
300B,500BEN 10002 Class  
0.5Stroke:300mm; 500mm



**Video Extensometers-**  
Mercury RTFeatures: Non-  
contact;2D and 3D  
measurement



**High and low Temperature**  
test chamberTemperature  
range: -  
70°C~280°C(compressor)-  
100°C~280°C(liquid  
nitrogen)

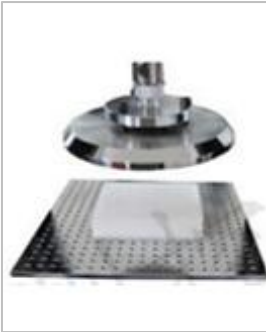


**High Temperature** Electric  
FurnaceTemperature range:  
+200-1100°C

# Other Grips



Three point bending test grip



Sponge foam Compression grip



Pneumatic tensile grip



Pneumatic wedge tensile grip



Pneumatic tensile grip



Hydraulic tensile grip



Hydraulic tensile grip



Fiberglass mesh tension Grip



Capstan Grip



Waterproof material Grip



Cord tension Grip



Ceramic adhesive strength Grip



Self-tightening roller Grip



Cord tension Grip



Shearing Fixture



Side Action Hydraulic Grip



90° peel grip



180° peel grip



Rubber plastic tensile grip

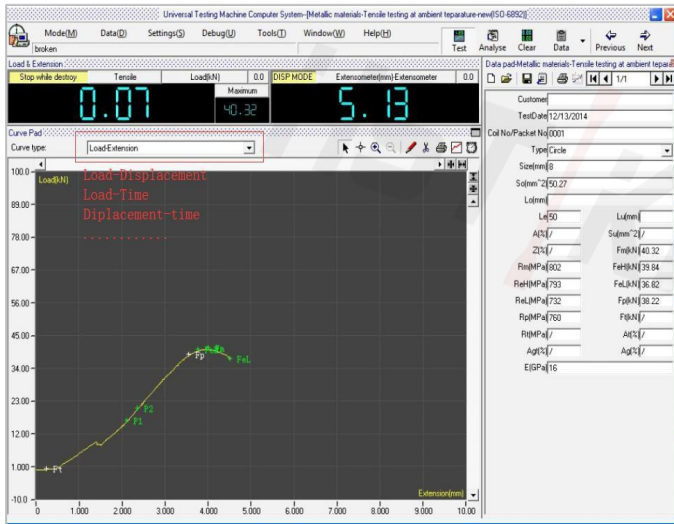


Wire winding tensile grip



Double clip grip

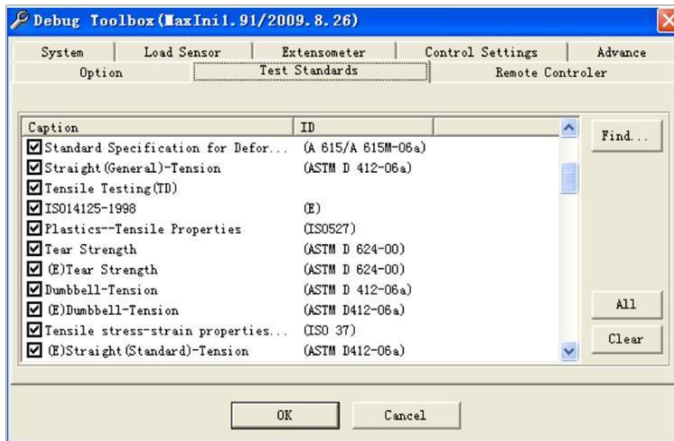
# Software features



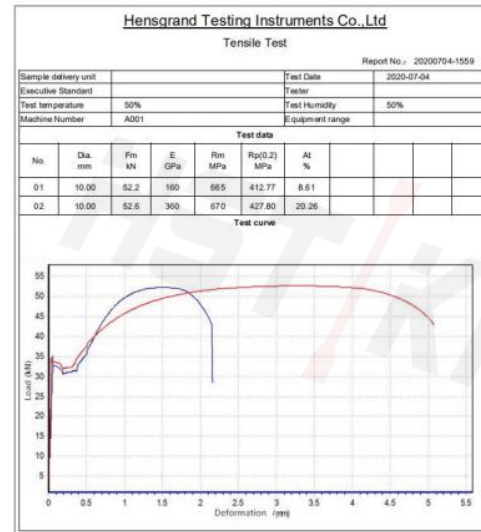
- Computer software interface, display test data, setup method, sample size
- Can displays Load - displacement, Load - time, Load-Extnsion, Stressi-Strain, Stress-Time, Strain-Time, Load-Stress, Stress-Dipment, Dispment-Time to display and print; Can switch at any time to observe, zoom in and zoom out, horizontal or vertical movement, real-time high speed sampling.
- Tested product information: provide users with the data to set about the products, one time to input and re-use permanently . for improving the accuracy, the data can be corrected by the formula automatically.
- Unit KG,N,LB can be exchanged

Items can be tested in the computer servo type universal testing machine Common items: ( display data and calculation )

- tensile stress
- tensile strength
- rate of elongation at break
- rate of stress at break
- stress strength
- tear strength
- the value of force at any point
- rate of elongation at any point
- pull-out strength



Test standard: provide users with the necessary applications to the test, covering GB, ASTM, DIN, JIS, BS ... and other testing standard specification.



Output and print report: Excel, word, template test report, can be edited customize To show test information, including test person, test standard, test curve, test max load etc, can add your company LOGO and company name,easy to edit.

