



TIME®6166/6167/6168

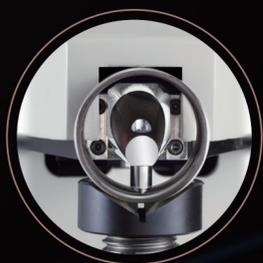
Rockwell Hardness Tester



TIME6166 Rockwell Hardness Tester

TIME6167 Superficial Rockwell Hardness Tester

TIME6168 Twin Rockwell Hardness Tester



Beijing TIME High Technology Ltd.

Perfect Integration of Heritage and Innovation

In 2001, TIME Group Inc. developed the first convex nose Rockwell hardness tester in China. High precision digital display and convex nose structure are two outstanding advantages, which creates a new era of hardness testing in China.

In 2021, TH300 ushered in its 20th birthday, and successfully changed into butterfly. The upgraded TIME6166 / 6167 / 6168 came into the market, which is a perfect combination of inheritance and innovation.

More powerful "core"
Faster speed

More intelligent UI
Convenient & comprehensive

More auto-operation
Auto-switch of test force;
Auto-reset after power off;

More high insight
Higher accuracy & resolution

More interconnected via expand application
U-disk, Micro-printer, Computer, Software



Convex nose

Indenter structure

It can measure annular, tubular and stepped workpieces.
Cylindrical surface, minimum outer diameter 3mm;
Inner ring surface, minimum inner diameter 23mm;



Cast aluminum rigid host

High strength die casting aluminum alloy process is adopted;
With sufficient aging and stabilization treatment;
Ensure the accuracy and durability of the equipment;

Exquisite painting technology

The whole machine adopts amino baking process, with high paint strength;
Oil resistance, flatness and smoothness.



Strong bones

The lead screw is quenched and tempered with special materials,
and the process of cylindrical grinding and screw grinding is adopted,
so the lifting is stable and reliable.

Super large disc handle

Full consideration of ergonomic design, more convenient,
fast and stable clamping sample.

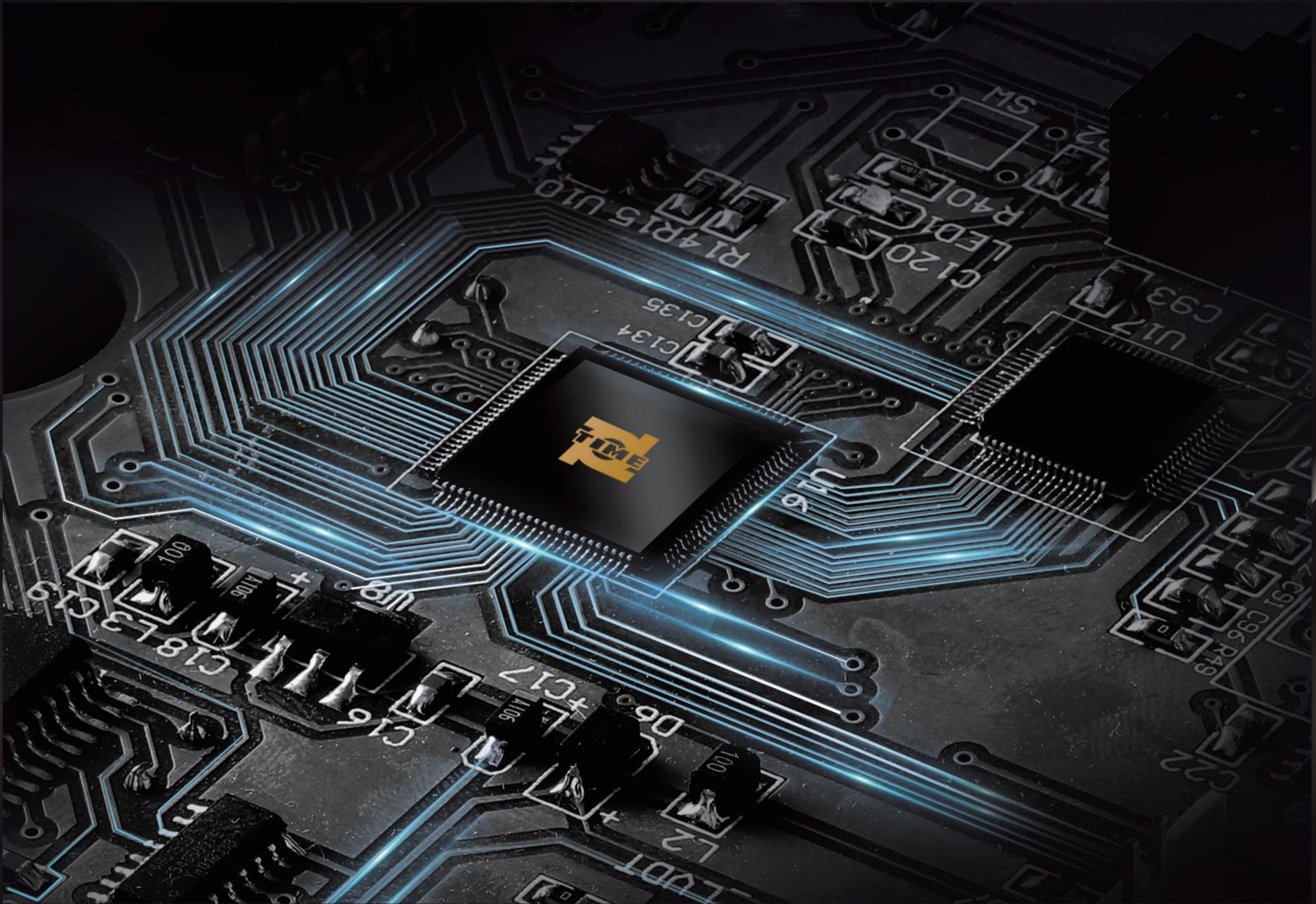
Large test space

Vertical direction 260mm; Horizontal direction 150mm;

The weight force is durable.



More powerful “core”



Using the latest international mainstream chip, after strict debugging, it is combined with the world's leading analog device, high-speed transmission 100 MIPS 8051 CPU, ISP flash memory and JTAG, to provide reliable system quality and excellent terminal characteristics.

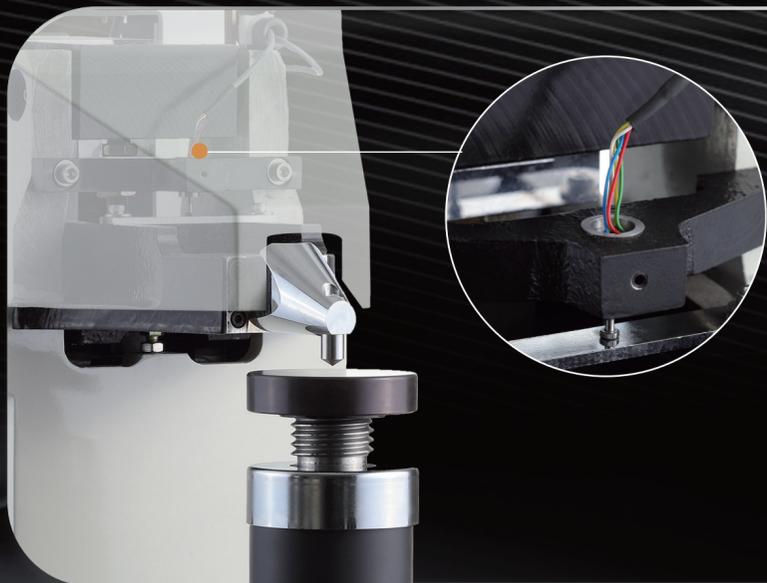
16 bit AD conversion, acquisition LVDT, force sensor and other multi-channel analog signals, up to 8 channels, two-way stepping motor control, no need to occupy CPU resources, release greater potential.

DGUS touch screen, human-computer interaction is more friendly.

More Auto-operation

While retaining the weight force, we also add the function of automatic switching between the test force and the scale, which can be automatically reset after power failure. You don't need to worry about forgetting to switch the test force.





More high insight

LVDT sensor is adopted, the resolution is increased to 0.01HR, and the measured value display of "residual depth value" is added innovatively. The display range is 10 ~ 700 μm . The system supports the higher calibration and verification, so as to achieve scientific truth-seeking!

More intelligent UI interface

The interface adopts intuitive UI and interaction design, which perfectly fits human intuition. It is the upgrading of thinking and experience, and away from the trouble of reading the manual.



More intelligent, more comprehensive and more convenient

The test results are clear at a glance via 5.7-inch TFT touch screen. The friendly UI interface supports freely switching between Chinese and English. It also provides a full range of real-time display, such as the current scale, test force, indenter, points, surface correction value, minimum value, maximum value, average value, repeatability, mean square error, strength conversion, hardness conversion, current operation prompt, and up and down limit value, accompanied by red prompt for overrun. Let you control everything more conveniently!



The four visualized tool buttons at the bottom fold your most commonly used settings.

HRC



All levels of menus are equipped with "Home key".
One click back.

HRC Options

15 / 30 scales can be selected freely and switched automatically



The holding time can be selected flexibly according to the specific situation.



This time, we added the initial test force, total test force and elastic recovery holding time, which can be set, and displayed in sections on the home page.

The countdown is accompanied by color change prompt, which meets the higher requirements for loading, unloading and holding time in the latest standards such as GB / t230-2018, iso6508 and ASTM E18.



组号	平均值	标尺	日期 & 时间
104	62.64	HRC	2020-11-30 11:36:41
103	62.90	HRC	2020-11-29 14:02:27
102	63.23	HRC	2020-11-29 13:56:53
101	74.31	HRC	2020-11-29 13:51:43
100	63.35	HRC	2020-11-29 13:07:35
99	63.48	HRC	2020-11-29 13:06:08
98	62.93	HRC	2020-11-29 13:04:08
97	62.61	HRC	2020-11-29 13:01:41
96	63.35	HRC	2020-11-24 09:14:31
95	65.28	HRC	2020-11-24 09:12:25

Data browsing options

It can read detailed data in real time.

序号	测量值	修正值	HV	日期 & 时间	HRC
3	62.85	0.5	766.8	2020-11-29 14:02:07	
2	63.18	0.5	774.8	2020-11-29 14:00:45	
1	62.67	0.5	761.6	2020-11-29 14:00:39	

This time, we have added more than 1500 groups of data storage space, which can process data in batches, and provide analysis and statistical results for detailed data.

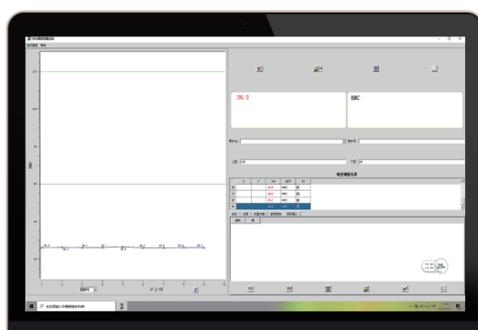


Administrator options

Debugging and calibration and other advanced settings interface.

— Expand application and make it more interconnected —

Data can be printed out via micro printer through serial port (optional printer).
Through the serial port and PC to achieve data transmission; matching powerful PC software.
It can provide gradient curve, mass data storage, generate experiment report and print.

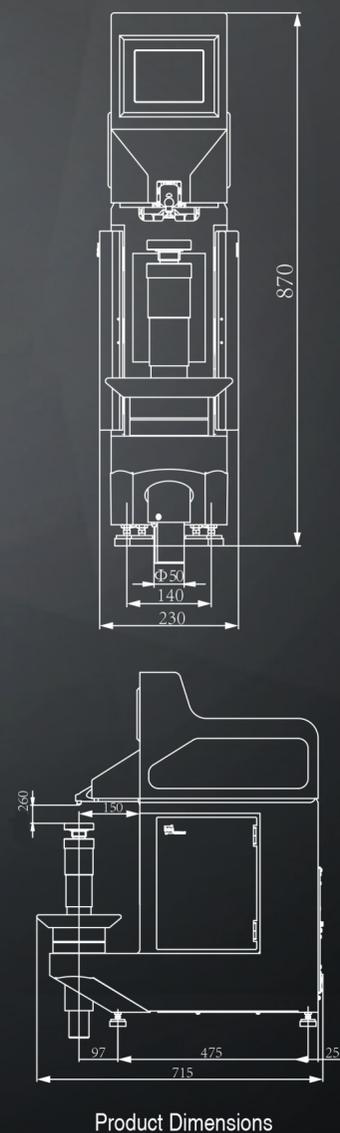


► Technical Specifications

Model	TIME 6166	TIME 6167	TIME 6168
Hardness scale	HRA、HRBW、HRC、HRD、HREW、HRFW、HRGW、HRHW、HRKW、HRLW、HRMW、HRPW、HRRW、HRSW、HRVW	HR15N、HR30N、HR45N、HR15TW、HR30TW、HR45TW、HR15WW、HR30WW、HR45WW、HR15XW、HR30XW、HR45XW、HR15YW、HR30YW、HR45YW	HRA、HRBW、HRC、HRD、HREW、HRFW、HRGW、HRHW、HRKW、HRLW、HRMW、HRPW、HRRW、HRSW、HRVW、HR15N、HR30N、HR45N、HR15TW、HR30TW、HR45TW、HR15WW、HR30WW、HR45WW、HR15XW、HR30XW、HR45XW、HR15YW、HR30YW、HR45YW
Resolutions	0.1/0.01HR		
Initial test load	98.07N/10kgf	29.42N/3kgf	29.42N/3kgf,98.07N/10kgf
Total test load	588.4N/60kgf 980.7N/100kgf 1471N/150kgf	147.1N/15kgf 294.2N/30kgf 441.3N/45kgf	147.1N/15kgf,294.2N/30kgf,441.3N/45kgf, 588.4N/60kgf,980.7N/100kgf,1471N/150kgf
Load method	Weights, automatic switch, automatic reset after power failure		
Display	5.7 inch TFT touch screen, intuitive UI interface and interaction		
Residual depth	10~700μm		
Language	Chinese/English		
Dwell time	1~99s		
Standards	GB/T230-2018,ISO6508,ASTM E18,BSEN10109,ASTM E140, ASTM A370		
Test space	Vertical: 260mm, horizontal: 150mm		
Workpieces	flat surface; cylindrical surface, minimum outer diameter 3mm; innder ring surface, minimum innder diameter 23mm		
Storage	≥ 1500 groups		
Power supply	220V/110V, 50Hz, 4A		
Dimensions	715mm×230mm×870mm		
Weight	100kg	90kg	120kg

► Standard Delivery

Name	QTY	6166	6167	6168
Main unit	1	●	●	●
Diamond indenter	1	●	●	●
Φ1.588mm ball indenter	1	●	●	●
Round anvial/V shape anvil	1 for each	●	●	●
Standard block HRA/HRBW	1 for each	●		●
Standard block HRC	3	●		●
Standard block HR15N /HR30N/HR30TW	1 for each		●	
Screw for indenter	2	●	●	●
Power cable	1	●	●	●
Level adjustment screws	4	●	●	●
Anti-dust cover	1	●	●	●
Certificate	1	●	●	●
User manual	1	●	●	●



Product Dimensions

— EXAMPLES OF APPLICATION —



NO.1 Ring/pipe inner wall hardness test



NO.2 Stepped sample hardness test



NO.3 Gear hardness test



NO.4 Surface hardness test of pin shaft



NO.5 Screw lead hardness test



NO.6 Hardness test of anchor clip



NO.7 Plexiglass plate plastic Rockwell HRMW test



NO.8 Use diamond specimen support to test HR30Tsm and HR15Tsm of thin tin plate

— OPTIONAL ACCESSORIES —



Steel ball indenter



Short, Flat, Slim diamond indenter



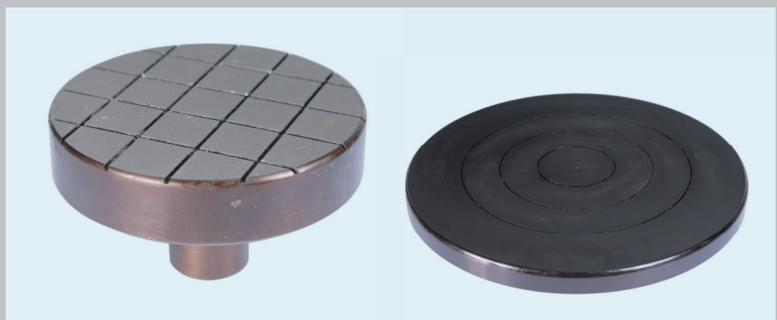
Point/V-shape anvil



Flat anvil diameter 225 & round flat anvil



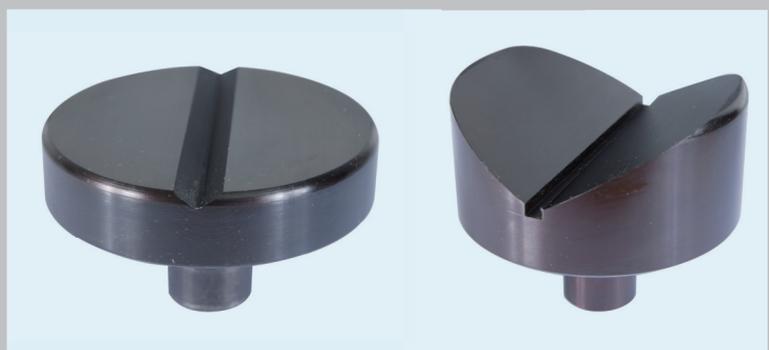
Auxiliary support



Thin sample anvil & flat anvil diameter 150



Auxiliary bracket



Flat/V-shape anvil & large V-shape anvil

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