



## **THV-30DX, THV-50DX, THV-100DX, THV-120DX** **Touch Screen Digital Vickers hardness tester with(Touch screen, Digital eyepiece, Motorized Turret)**



### **Main Features:**

1. The user can customize the standard test force;
  2. Electric load closed loop control, automatic load is applied;
  3. Test force automatic correction, improve the accuracy of the force a number of levels;
  4. The hardness value can be automatically corrected as per standard block different forces,;
  5. Easy use, it do no need to install weights, special transducer for loading test force;
  6. Touch screen interface, easy to operate, in any language version;
  7. Using a modular design, easy maintenance;
  8. Large sample space for placing a large sample;
  9. Save more samples and testing information;
  10. Set up a password-protected setup parameters;
  11. U-disk data saved directly to EXCEL format for easy editing and processing;
  12. It can be easy for upgraded to Automatic Vickers hardness tester.
  13. Equipped with Motorized Turret for indenter and Object lens
- Equipped with Touch screen LCD & operation panel.  
Test both HV & HK scales (with optional Knoop tester)

### **Advantage:**

1. High Good Values
2. Good Quality (ISO Certification)
3. Knoop hardness can be measured with optional indenter
4. Stepless adjustable brightness light source;

### **Applicationfields:**

Heat treatment, carbide, quench hardened layer,  
the surface coating layer, steel,  
non-ferrous metal and small and thin shape parts, etc.

### **Application materials:**

--Ferrous metals, non-ferrous metals, IC thin sections,  
--coating layer, ply-metals  
--Glass, ceramics, agate, precious stones, thin plastics, etc  
--Hardness test such as that on the depth  
and gradient of the carbonized layers and quenched hardened layers.



## Technical Specifications:

Model		THV-30DX	THV-50DX	THV-100DX	THV-120DX
Turret Type		Manual	Manual	Manual	Manual
Test Force		0.3Kgf (2.94N)、 0.5Kgf (4.90N)、 1.0 Kgf (9.8N)、 2.0Kgf(19.6N)、 2.5Kgf(24.5N)、 3.0Kgf(29.4N)、 5.0Kgf(49.0N)、 10.0Kgf(98.0N)、 20.0Kgf(196N)、 30.0Kgf(294N)	1.0 Kgf(9.8N)、 2.0Kgf(19.6N)、 2.5Kgf(24.5N)、 3.0Kgf(29.4N)、 5.0Kgf(49.0N)、 10.0Kgf(98.0N)、 20.0Kgf(196N)、 30.0Kgf(294N)、 40.0Kgf(392.0N)、 50.0Kgf(490N)	1.0 Kgf(9.8N)、 2.0Kgf(19.6N)、 2.5Kgf(24.5N)、 3.0Kgf(29.4N)、 5.0Kgf(49.0N)、 10.0Kgf(98.0N)、 20.0Kgf(196N)、 30.0Kgf(294N)、 50.0Kgf(490N)、 100.0Kgf(980N)	2.0Kgf(19.6N)、 3.0Kgf(29.4N)、 5.0Kgf(49.0N)、 10.0Kgf(98.0N)、 20.0Kgf(196N)、 30.0Kgf(294N)、 50.0Kgf(490N)、 60.0Kgf(588N)、 100.0Kgf(980N)、 120.0Kgf(1176N)
	KGF (N)				
Min. Test Unit		0.125μm (Optional: 0.0625um )			
Max Height of Specimen		180mm			
Distance from Indenter to Out Wall		160mm			
Hardness Test Range		5HV~5900HV			
Method of Test Force Applied		Automatically Load and Unload Test Force			
Test Microscope Amplification		100 <sup>X</sup> (observation)、200 <sup>X</sup> (Measuring)、 (Optional for :50 <sup>X</sup> ,400 <sup>X</sup> )			
Object Lens Amplification		10X、20X Optional for: 5 X、40X(50X)			
Output		U disk	U disk	U disk	U disk
Dwelling time		0~99S (input any time by key)			
Dwell Time		0~99s (1 second as a unit, optional key in)			
Power Source		AC220V+5%,50-60Hz			
Overall Dimension		560*260*670mm			
Net weight		About 40Kg			

## Standard Accessories:



Item	Quantity	Item	Quantity
Weight	3	Vickers hardness block 550-750HV	1
V shape testing table	1	Vickers hardness block 300-550HV	1
Round flat testing table	1	U-disk	1
Power cable	1	Big testing table	1
Spare Fuse (2A)	2	Objective 10X	1
Operation Manual	1	Product Certificate	1

### Optional Accessories:

1. An objective lens 5X, 40X, 50X
2. Knoop indenter;
3. 15X eyepiece micrometer;
4. Digital X-Y stage: X, Y axes significant position accuracy: 1 micron;
5. Vickers indentation hardness measuring device screen:  
For Digital Brinell / Micro / Vickers indentation displayed on the screen, replace the eyepieces, determine indentation border, in order to measure the hardness;
6. Vickers measuring software:  
The indentation clearly displayed on the computer screen, and automatic or manual measurements;
7. Universal clamps, flattening device, insert the fixture;
8. Various hardness block, can identify with the third party, such as a certificate Metrology Institute;
9. Various supplies sample preparation.