

## **VERTEX**

# VICKERS TESTING MACHINE VM-LC-10A



- Close Loop high precision load cell structure.
- Dual optical systems design (eyepiece + camera path), both paths can work at same time, no need switch knob.
- Traditional keypad type, menu structure, easy operate.
- Automatic hardness calculation function.
- Automatic turret switching, automatic loading, dwell, unloading.
- With emergency stop button, operation more safe.
- Automatic turret, digital eyepiece with encoder.
- Large range test force: 0.1 to 10kgf.

#### **FEATURES:**

- Closed loop design with high accuracy load cell, no need to install dead weights, installation more easy and loading - dwell - unloading automatic, easy to operate.
- With load automatic correct function, greatly improved test accuracy and calibration more easy
- Modular design, simple maintenance
- With hardness conversion function, from HV hardness value can covert to HR, HB, HK, etc.

- With HV/HK test function
- Built-in printer for optional purchase
- Can work with camera and Vickers indentation measuring software
- According to different visual habits of the operators, the strength of the light source can be adjusted. To avoid the visual fatigue for long time operation.
- Industrial digital screen can direct display hardness value, conversion hardness, testing method, testing force, dwell time, test number and testing process.
- One-time casting aluminum molding shell ensure structure more stable; Adopted car painting technology, pure white color looking more decent; High scratch resistance capability, used for years still brightness like new.



#### **APPLICATION:**

- Widely used to test the hardness of all kinds of metal materials (steel, nonferrous metals, tinsel, cemented carbide, sheet metal, etc.)
- Surface layer / coating (Carburization, nitriding, decarburization layer, surface hardening layer, galvanized coating, etc.)
- Glass, chip, ceramic, plastic and rubber, etc.

#### **SPECIFICATION:**

Model	VM-LC-10A	
Turret	Automatic (motorized switch)	
Force loading	Automatic loading - dwell - unloading	
Testing Force	0.1Kgf(0.98N), 0.2Kgf(1.96N), 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)	
Hardness Scale	HV0.1, HV0.2, HV0.3, HV0.5, HV1, HV2, HV2.5, HV3, HV5, HV10	
Conversion Scales	HRA, HRB, HRC, HRD, HRE, HRF, HRG, HRH, HRK, HV, HK, HBW, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T	

Min measuring unit	0.0625μm	
Hardness range	5-4000HV (screen display range: 5 - 9999HV)	
Eyepiece	10X digital eyepiece with built-in encoder, automatic calculate data	
Objective	10X, 40X	
Magnification	100X (measurement), 400X (measurement); Measuring range:200um Both lens can do observe and measurement work directly	
XY work table	Dim.:100x100 mm, Max. Travel Range: 25x25mm, Moving Resolution Ratio: 0.01mm	
Dwell time	1-99S (1 second per step)	
Data output	Large LCD screen display (or optional purchase built-in printer)	
Test space	165mm x 130mm (Height x Depth)	
Power supply	AC220V, 50Hz	
Standard	ISO 6507, ASTM E92, JIS Z2244, GB/T 4340.2	
Overall Dimension	585x200x630mm	
Net weight	42kg	
Packing size	690x430x930mm	
Gross weight	55kg	

### **STANDARD ACCESSORIES:**

Item	Quantity
XY cross table	1
10X digital eyepiece	1
Vickers hardness block	2
10X objective lens	1
40X objective lens	1
Regulating Screw	4
Dust cover	1
Flat clamp	1
Power Cord	1
Accessory case	1
Spare Fuses (2A)	2
Production certificate	1
Warranty card	1
Manual book	1





