



B.N.C.TOOLING Co.,Ltd.

BNCTOOLING.COM
BNCTOOLINGSHOP.COM

69/90 Hatairat Rd., Minburi ,Minburi Bangkok (Thailand) 10510



Vision Measuring Machine

Automatic Micro Vickers Hardness Tester

AutoVicky ZHV-1000A

Model	AutoVicky ZHV-1000A
Code#	823-140A
Standard	ASTM E-92, ISO 6507, GB/T4340
Certificate	CE



Product Characteristics

- Auto-stage, Auto-measurement and Vickers hardness testing system;
- Loading-force: Precise dead weights ensures the loading force system reliably and precisely;
- Optical-path: 160mm High-resolution optical microscopy path makes image of indention sharply and excellent;
- Auto-Turret: the switch position of HV indenters and 10x/20X/40x/60x objectives is repeatable and accurately;
- Auto-stage: it is driven by precise step motor with large travel size 100x100mm and heavy load ability ;
- Auto-Measurement: automatic hardness testing and measurement software; 3A can control hardness tester and data communication, includes the switch of 10x, 20x, 40x, 60x objectives and Vickers indenter, auto loading, dwell and unloading, single or multiple indentation, set step distance, movement mode, auto record indentation dialog line and hardness value, auto generate CHD depth and hardness curve, error statistics, test times group statistics, generate Excel and Word format report.



Vision Measuring Machine

Product Application

Vickers method is based on an optical measurement system, it specifies a range of light loads using a diamond indenter to make an indentation which is measured and converted to a hardness value. It is very useful for testing on a wide type of materials, but test samples must be polished to enable measuring the size of the impressions. A square base pyramid shaped diamond is used for testing in the Vickers scale. Typically loads are very light, ranging from 10gm to 1kgf, although "Macro" Vickers loads can range up to 50 kg or more.

Specification

Commodity		Automatic Twin Micro Vickers/Knoop Hardness Tester
Model		AutoVicky ZHV-1000A
Code#		823-140A
Focus-Mode		Manual-focus
Load-System		High-precision-weight
Test Load	gf	10 / 25 / 50 / 100 / 200 / 300 / 500 / 1000
	mN	98.07/ 245.2/ 490.3/ 980.7/ 1961/ 2942/ 4903/ 9807
Loading-Mode		Automatic loading, dwell and unloading
Dwell Time		5 ~ 99 s can be adjustable
Turret System		Auto-Turret
Dual Optical Microscopy System		High-resolution Optical Microscopy Path 10x digital measuring eyepiece 20x, 40x, 60x objective for Vickers measurement 0.5x C-mount with camera for dual vision measurement
Magnification		Optical observation magnification : 100x (10x Objective and 10x Eyepiece)
		Optical measurement magnification :200x, 400x and 600x (20x, 40x and 60x Objective and 10x Eyepiece)
		Digital observation magnification: 350x
		Digital measurement magnification: 700x, 1400x and 2100x
Light Source		LED parallel Illuminator
Digital Image System		0.5x C-adapter and 1.3Mpixel CMOS camera
Max. Specimen Height		90mm
Max. Specimen Depth		110mm
Hardness Scale		Switch between HV and HK
Auto-Stage	Type	Motorized
	Dimensions	200 × 180 mm
	X-Y Travel	100 × 100 mm
	Motorized	Step motor
	Resolution	0.5um
Driving Controller		VickyControl2000
Hardness Testing Software		3A: Auto-stage; Auto-measurement
PC system		DELL OptiPlex3046MT
LCD monitor		21.5" Dell LCD Monitor
Executive Standard		ASTM E-92, ISO 6507, GB/T4340
Dimensions		W190 × D 430 × H 520 mm
Net. Weight		80Kg
Power Supply		AC 220V/50Hz or 110V/60 Hz