

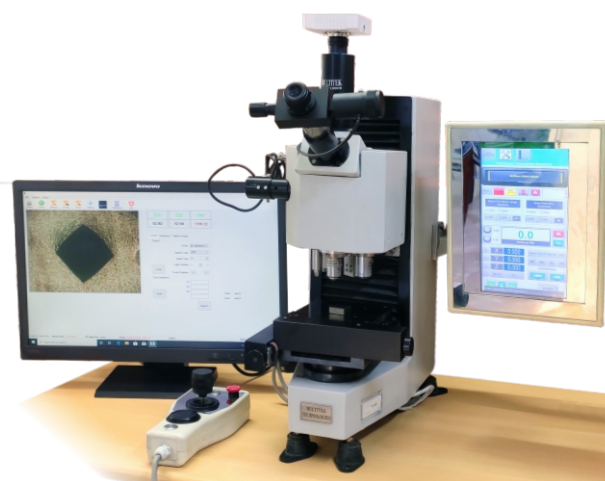
Load Cell Micro cum Vicker Hardness Tester VLT-50

For Microvicker,
Vicker, Rockwell and
Brinell Hardness Testing



INNOVATIVE AUTOMATIC HARDNESS TESTERS

MLT-1	0.01Kg – 1 Kg (Microvicker Hardness Tester)
MLT-2	0.01 Kg – 2 Kg (Microvicker Hardness Tester)
VLT-10	0.300 Kg – 10 Kg (Vicker Hardness Tester)
VLT-20	1.0 Kg – 20 Kg (Vicker Hardness Tester)
VLT-30	2.0 Kg – 30 Kg (Vicker Hardness Tester)
VLT-50	2.0 Kg – 50 Kg (Vicker Hardness Tester)
VLT-50B	2.0 Kg – 50 Kg (Vicker Hardness Tester with Brinell Testing)
RLT-150	60 Kg – 150 Kg (Rockwell Hardness Tester)
RLT-150S	60 Kg – 150 Kg (Superficial Rockwell Hardness Tester)
RLT-150B	60 Kg – 150 Kg (Rockwell Hardness Tester with Brinell Testing)



Wide Range of Hardness Testing 0.01 KG TO 50 KG

All test force control is performed by electric control. The high quality load sensing system can do a wide-range hardness test by one load cell.

Test force

(0.010gf)

1gf Step

(150kgf)

Vickers

HV0.1	HV0.2	HV0.3	HV0.5	HV1
HV3	HV5	HV10	HV30	HV50

Knoop

HK0.1	HK0.2	HK0.3	HK0.5	HK1
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Brinell

1/1	1/2.5	1/5	1/10	1/30
2.5/6.25	2.5/15.625	2.5/31.25	5/25	5/30
2.5/100	2.5/125			

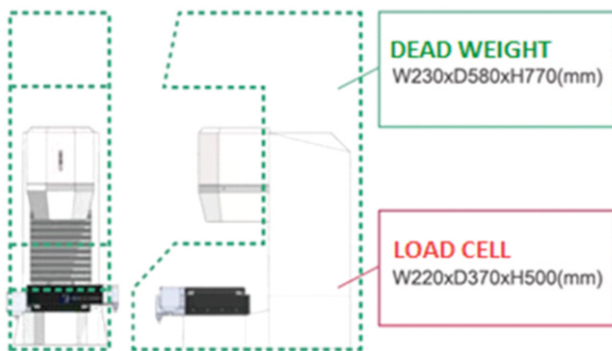
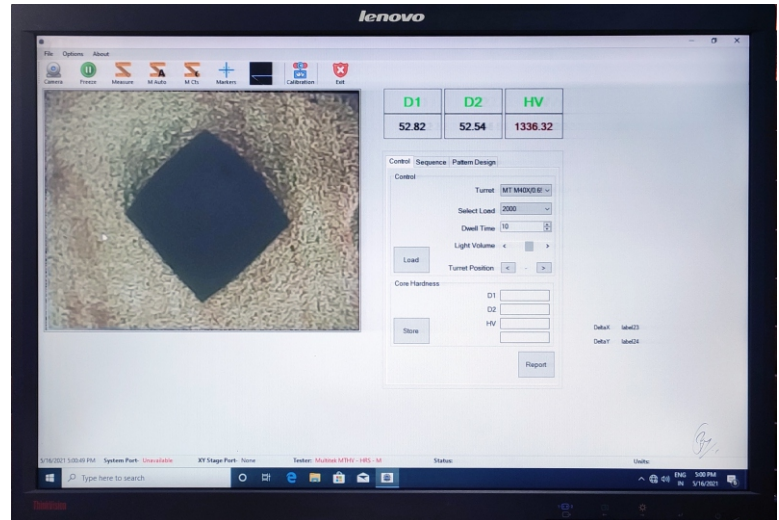
Rockwell

HR15N	HR15W	HR15Y	HRG	HRP
HR30N	HR30W	HR30Y	HRB	HRM
HR45N	HR45W	HR45Y	HRF	HRL
HR15T	HR15X	HRC	HRK	HRV
HR30T	HR30X	HRD	HRE	HRS
HR45T	HR45X	HRA	HRH	HRR

Motorized focus and auto read function (standard equipment)

Motorized focus and automatic reading are equipped standardly. Infinity-corrected objective lens and 5MP HD USB 3.0 camera offers a clear image.

This automatic-system can dissolve a personal error in reading of indentation by the latest image processing software and reduce hardness measurement cost time.



Light Weight & Compact

The optimal design is light weight, compact. Easy to operate interface in touchscreen and software for both manual and automatic testing.

The turret which mounted four objective lenses

One Lens and one Indenter is provided as standard. But we can easily increase the no. of lenses and Indenter in turret as per customer's requirement



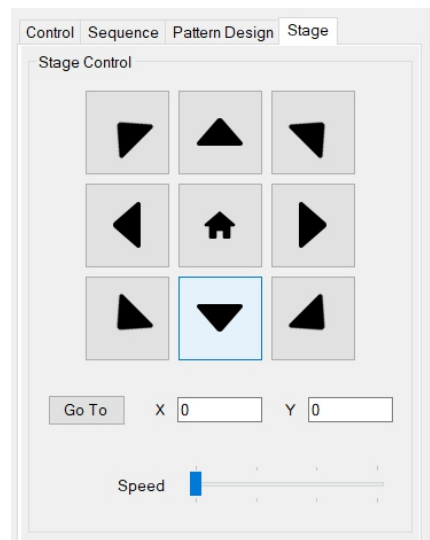
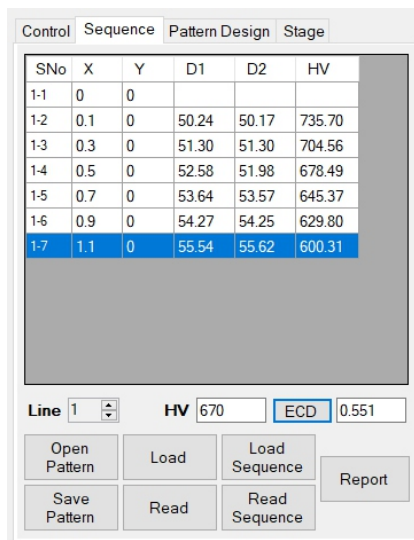
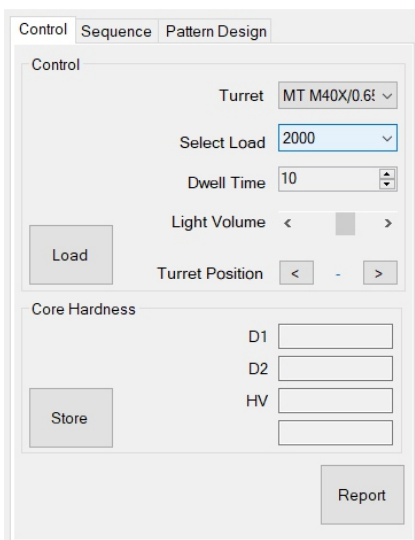
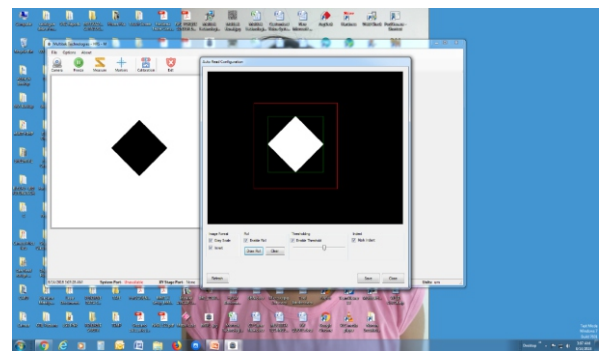
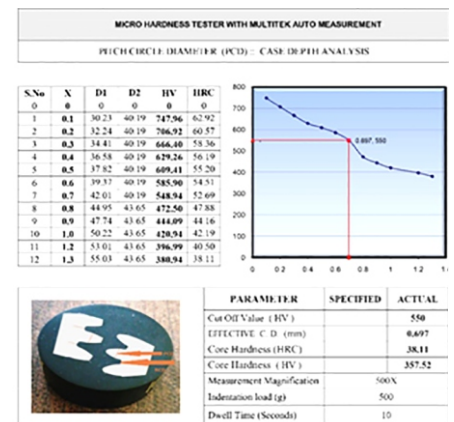
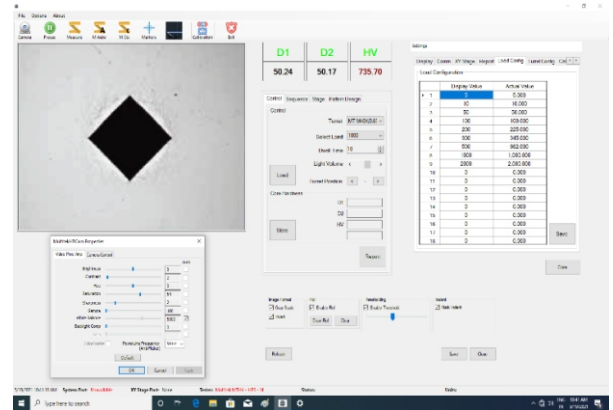
Window 10 PC

In addition to operation of a testing machine is on Window10 PC for better user Interface and better reporting features.

INNOVATIVE AUTOMATIC HARDNESS TESTERS

User Friendly Interface

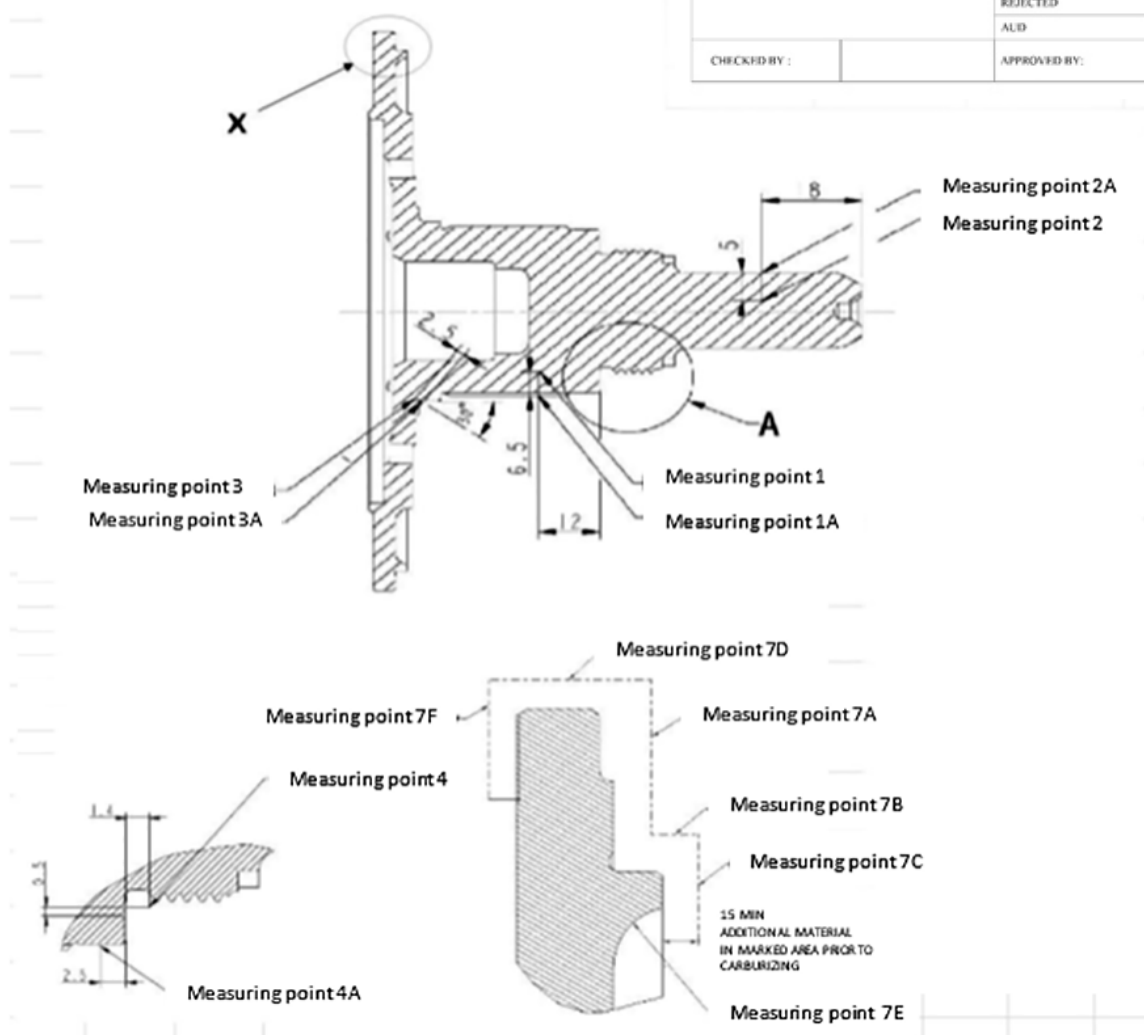
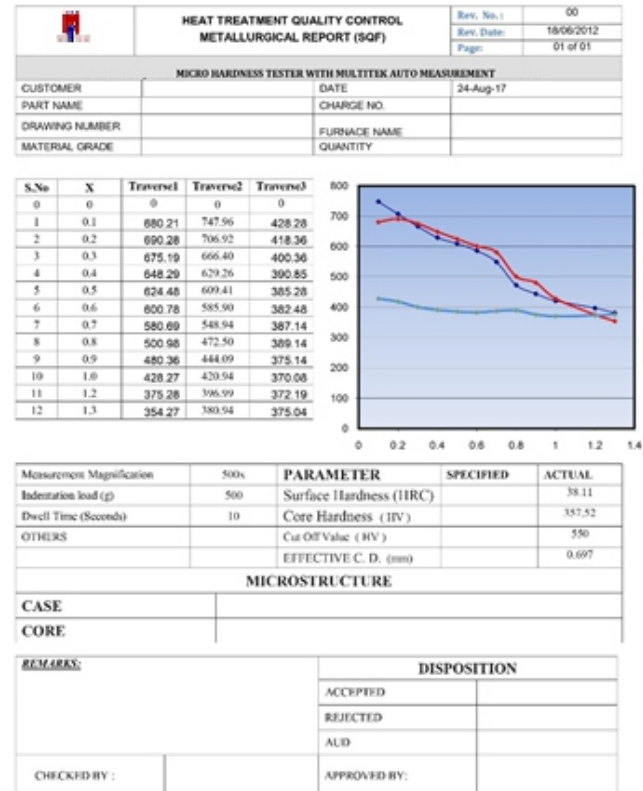
- ❖ Hardness Tester comes with a Multitek Technologies HRSM software which helps us to take results accurately and fast with its user friendly Interface and various features. HRSM has a Multiple Calibration Process for Loads, Lenses and Image Diagonal which makes reading more accurate and easy to read by its Auto Read system.
- ❖ We can save multiple Traverse Format for various sample which helps in saving time for long traverse Sample Testing.
- ❖ We can also align traverse movement angle in Multitek Technologies HRSM which helps in tasking precise angular traverse in testing of sample.
- ❖ HRSM has a various template reporting system which makes easy to take report for different customers in one software.
- ❖ HRSM has a various template reporting system which makes easy to take report for different customers in one software.
- ❖ Fully automatic camera. This will automatically update its aperture according to ambient light conditions Indent Sharpness is algorithm based and this too works on live Image in both automatic and manual mode



MULTITEK TECHNOLOGIES HRSM SOFTWARE FOR ACCURATE MEASUREMENTS

User Friendly Interface

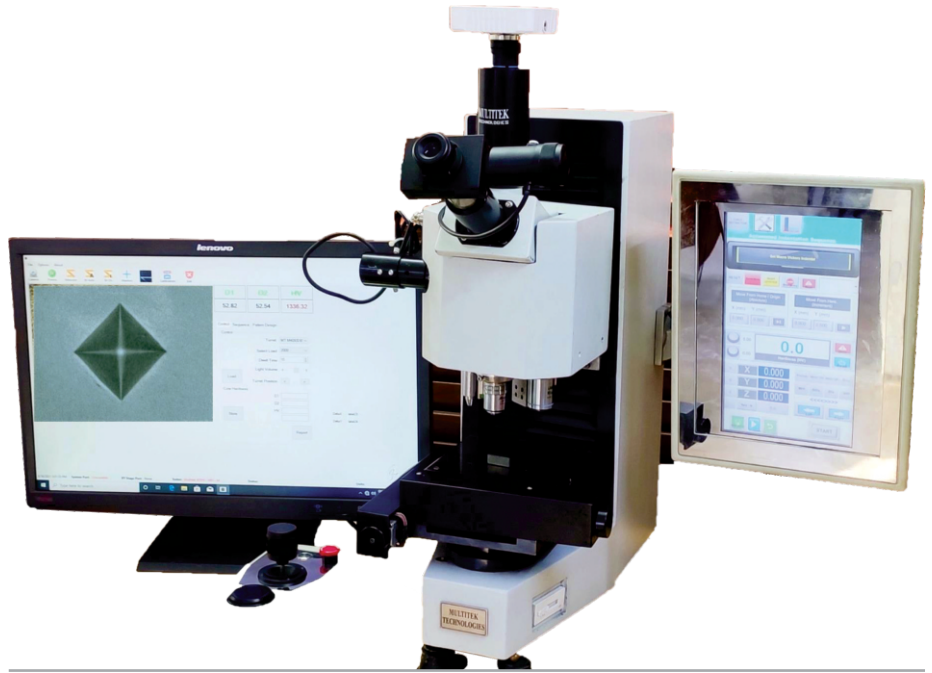
- ❖ A highly impressive and fully user settable reports are created after every measurement. Other items can be added and deleted as per individual customer requirement.
- ❖ Reports are saved automatically at predefined location.
- ❖ Several Formats can be used at the same time for different samples and different user or customer requirements.



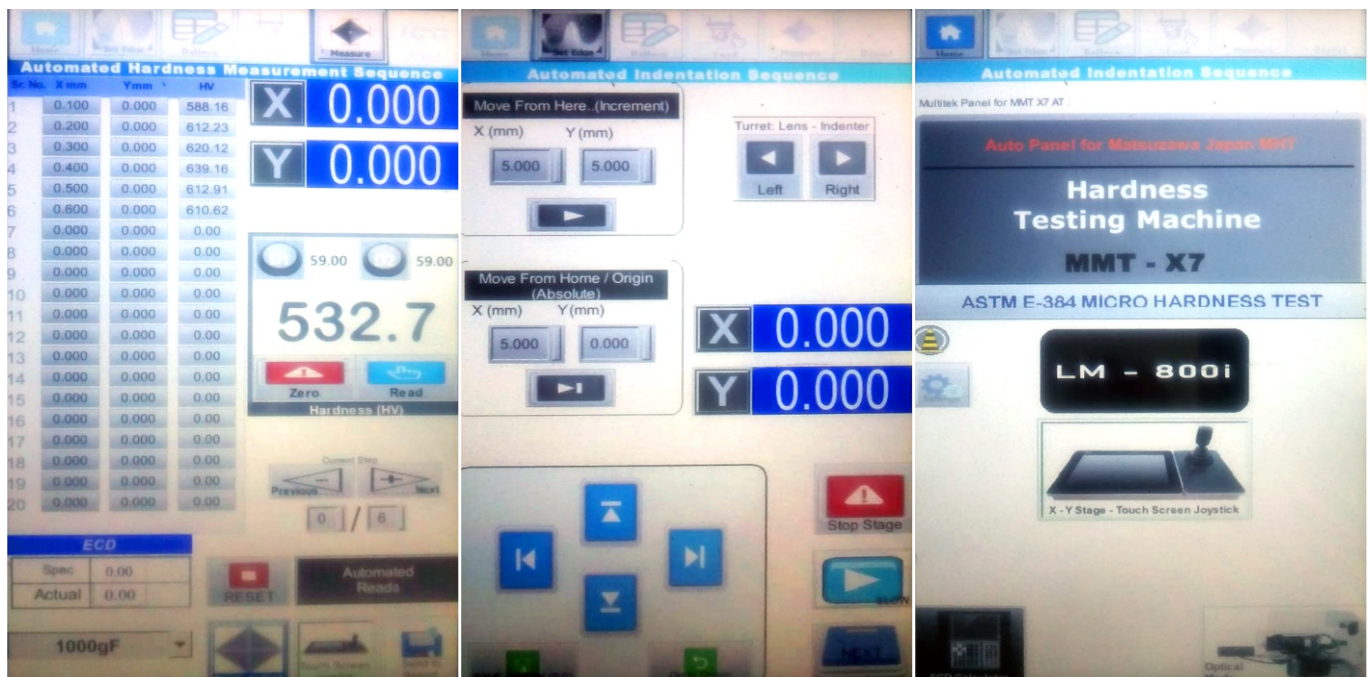
TOUCHSCREEN CONTROL SYSTEM WITH MULTI PATTERN TEST AND CUSTOMIZED REPORT INTERFACE WITHOUT PC

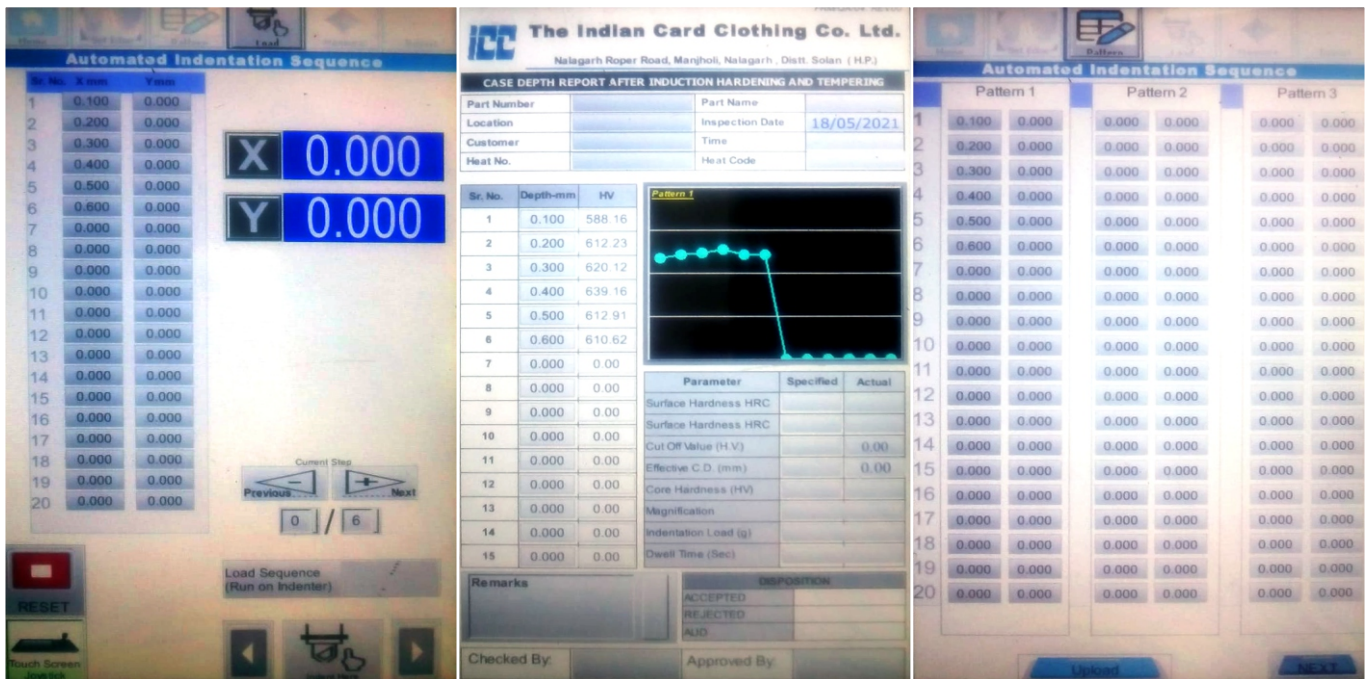
Hardness Tester comes with a touch Screen Control Panel with which we can easily Make Multiple traverse pattern and take their results with their Graphs and Effective Case Depth very accurately and less time on Customized Report Format without PC.

Touch Screen Control Panel also have a USB port which supports USB Storage device. Which helps us to take data from machine and save, print, email report from any other PC



Easy to use motorized stage setup with joystick, touchscreen and software. For easy, accurate and fast testing can be done in any testing process either in manual or auto mode.





SMART CONTROL PANEL WITH JOYSTICK MULTIPLE SHORTCUT KEYS

- ❖ Hardness Tester comes with a control Panel which have multiple shortcut apparatus on it.
- ❖ It has a 3 axis Joystick system for easy, precise and quick movement at any location on sample.
- ❖ It also have a Z axis fine focusing wheel in the panel which makes it very easy to precisely focus on sample.
- ❖ We also provide some shortcut keys on this control panel e.g. loading key, emergency stop and two other keys for speed control of all axis of movement machine.

SPECIFICATIONS

Test Force	Vickers	0.981, 1.961, 2.942, 4.903, 9.807, 29.42, 49.03, 98.07, 294.2, 490.3(N)
		1, 3, 5, 10, 20, 30, 50(Kgf)
	Knoop	0.981, 1.961, 2.942, 4.903, 9,807(N)
		0.1, 0.2, 0.3, 0.5, 1(Kgf)
	Brinell	1/9.807, 1/24.52, 1/49.03, 1/98.07, 1/294.2, 2.5/61.29, 2.5/153.2, 2.5/306.5, 5/245.2(N)
		1/1, 1/2.5, 1/5, 1/10, 1/30, 2.5/6.25, 2.5/15.625, 2.5/31.25, 5/25, 5/30, 2.5/100, 2.5/125(Kgf)
	Rockwell	60, 100, 150 (Kgf)
Test Force Dwell Time	5~99sec	
Indenter	Standard Vickers(HV), Option: Knoop (HK), Brinell (HBWØ1, Ø2.5, Ø 5mm), Diamond Indentor(Rockwell), Ball Indentor (Rockwell)	
Objective Lens	Infinity-corrected objective lens standard: 10x, 20x, option: 5x, 40x, 50x, 100x	
Min Measuring Unit	0.1µm	
Measurement view	5x:1000µm, 10x:500, 20x:250µm, 40x:80µm, 50x:100µm, 100x:50µm.	
Indenter Measurement	Automatic / manual on Live Camera Image on Windows10PC	
Camera	5MP HD USB3.0 Camera	
Controller	3-axis controller	
Operation Panel	Table Pc (Windows-10) (Optional) and Touch Screen control panel for manual testings	
Max. Specimen Height	140mm	
Accuracy	ISO 6507-2, JIS B7725 JISB7734, ASTM E-384	
Power supply	200 to 240v-1 Single –Phase 50/60hz	