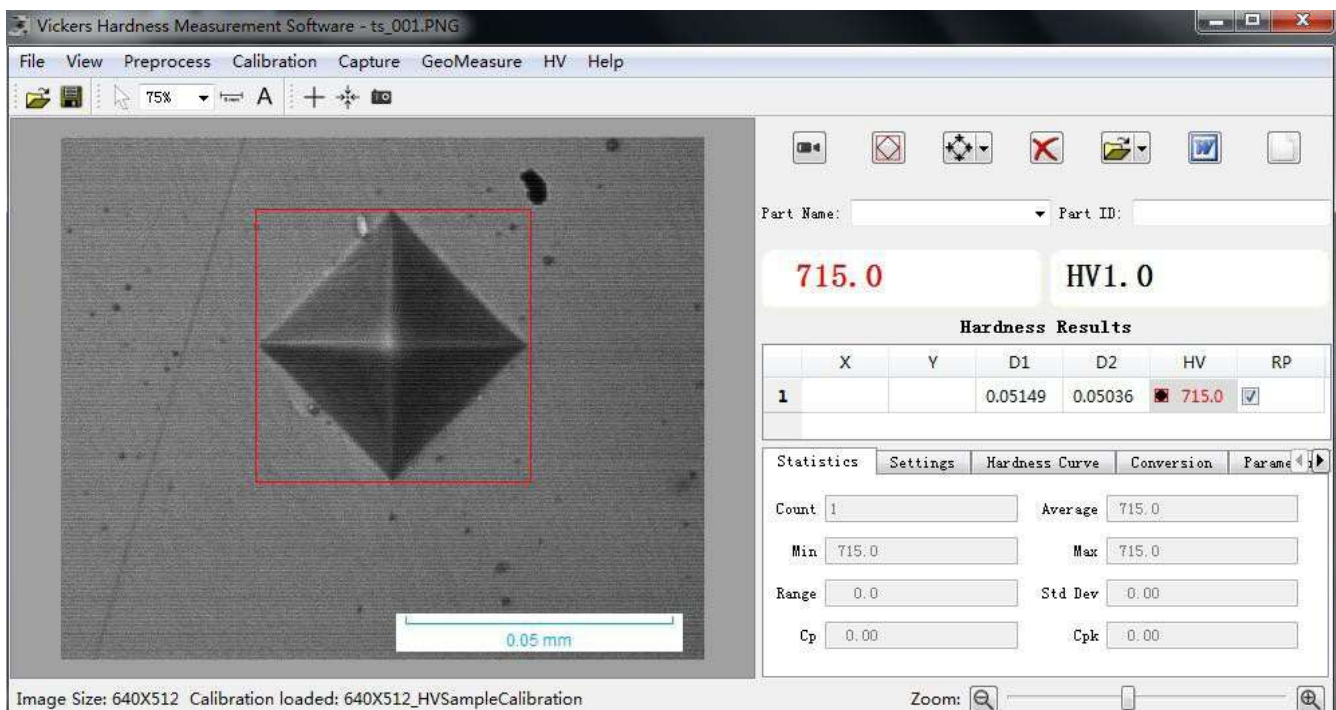




HARDNESS MEASUREMENT SOFTWARE- **BHVS-A**



MAIN FUNCTIONS:

- Auto hardness measurement: With a click of a button, the software automatically measures the diagonals of the indentation, calculates the hardness value and the statistics.
- Hardness curve: With the depths of test points by user input, the software automatically plots the hardness curve(s); User may save and load the depths in a depth template file for later testing for convenience.
- Conversion, compensation, and validation: Converts HV to other hardness scales ; Validates the test results with sample dimensions; Compensates the test results with respect to sample cylindrical/spherical diameters.
- Statistics: Automatically updates the statistical values such as average, min and max, standard deviation, Cp and Cpk.
- Auto-alarm: Automatically marks the out of spec measurements.
- Test report: Automatically generates WORD or EXCEL report with customizable template.
- Data archiving: Measurement data and images can be saved in one file for later retrieval.
- Knoop Scale: Can be configured for Knoop Scale measurement.



- Other Functions: Includes the basic functions of imaging system such as image capture, camera calibration, image processing, geometric measurement, document labelling, album management, and printing with specified magnifications.

HARDNESS REPORT FORMAT AS BELOW:

Micro/Vickers Hardness (HV) Test Results

Submitter		Date Submitted											
Part Name: Gear		Part #: 0002											
# of Samples		Sample Design.											
Qual. UL: 650	Qual. LL: 450												
Machine ID		Meas. Standard: GB/T231.1-2002											
Sample Cyl./Sph. Diam. (mm): 0		Force (g): 1000											
Test Results													
#	Depth	T	D1	D2	Hard.	Comment	#	Depth	T	D1	D2	Hard.	Comment
	µm	µm	µm	µm	HV			µm	µm	µm	µm	HV	
1	100		51.95	54.48	630.9								
2	200		93.4	92.06	218.7								
1	300		54.48	55.005	206.6								
Case Hardness (HV): 550		Case Depth (µm): 119.5											
Incident Images													
	Statistics												
Maximum: 630.9		Minimum: 206.6		Average: 351.1		Std. Dev.: 114.26		Cp: 0.29		Cpk: -0.29			
Operator		Test Date: 2011.12.25		Auditor		Audit date							