

AAV500

Automatic Vickers Micro Hardness Testing System

Technical Data

Automatic indentation measurement
 Measurement reproducibility: $\pm 0.5\%$ ($0.1\mu\text{m}$)
 Measurement method: Quadratic curve regression
 Measuring time: 0.3 seconds
 Resolution: $0.1\mu\text{m}$
 Manual measurement function: Measurement method with video line
 X-Y automatic stage
 Stage area: 130x130mm
 Movement range: 50x50mm
 Minimum step: $1\mu\text{m}$
 Software functions
 Patterned measurement: Line, staggered, 3-point staggered, matrix, circle, arc, random
 Teaching measurement pattern setting
 Hardness calculation function
 Hardness conversion function
 OK/NG judgment
 Analysis software functions: Device condition display, Measurement data display, Statistical calculation, Graph display
 Dimensions (W x D x H) / Mass
 AAV-503 / AAV-504: 665x516x1000mm / 91kg

FEATURES

This system can perform all operations required in the Vickers and Knoop hardness tests such as loading, turret indexing,

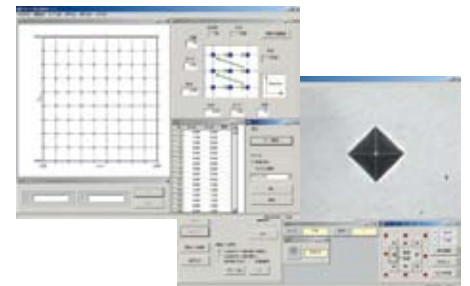
focusing, indentation measurement, and measurement position movement in full automatic, so it is optimal for the labor saving requirements of your test environment.



AAV-503 / AAV-504

- An indentation dimension automatic measuring time of 0.3 seconds is achieved (when a PC with recommended specifications is used), which dramatically improves operation efficiency.
- Measurement reproducibility of $\pm 0.5\%$ is achieved (For objective lens 50X, diagonal line 11 to 45mm, and 500HV), which provides reliable and stable test results.
- All operations from test condition setting to test result analysis can be performed on a Windows PC. In addition, data processing for the test results can be performed by using spreadsheet software.

The AAV-500 Series reduces individual differences in indentation dimension measurement in the Vickers hardness test by adopting special image analysis technologies. In addition, improved precision and high speed have been realized with a measuring time of just 0.3 seconds.

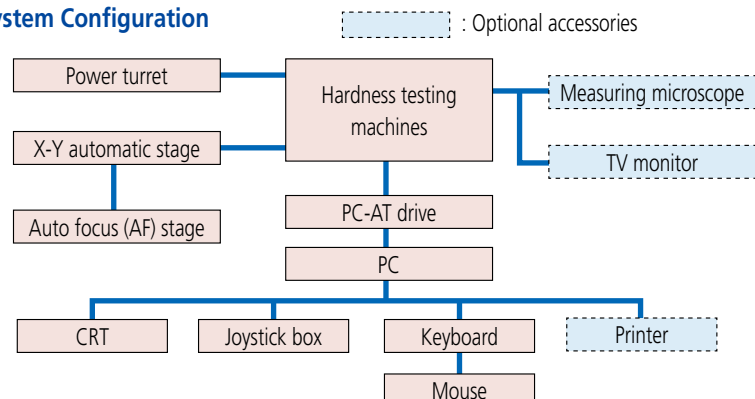


SPECIFICATIONS

Model No.	AAV-503	AAV-504
Order No.	810-727*	810-728*
Test force range	1.961 - 196.1N	9.807 - 490.3N
Test force switching	Manual	Manual
Objectives	10X / 20X	10X / 20X
Measurable indentation size	40 - 400 / 20 - 100 μm	40 - 400 / 20 - 100 μm
Resolution	$0.1\mu\text{m}$	$0.1\mu\text{m}$

* To denote your AC power cable add the following suffixes to the order No.:
A for UL/CSA, **D** for CEE, **DC** for CCC, **E** for BS, **F** for SAA, **K** for EK, **No suffix** is required for JIS/100V

System Configuration



Mitutoyo

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