

# HARDNESS TESTING

## Model ZHV30 Micro and Macro Vickers hardness test machine

### Specification

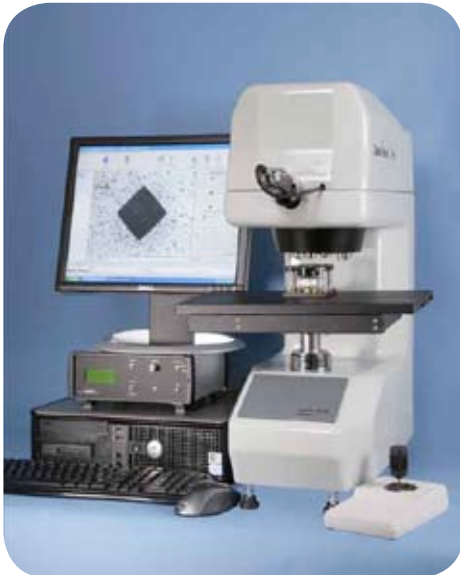
- Range of applications including Vickers, Knoop and Brinell.
- Automatic turret allows one touch operation when changing between indenter and lens position.
- Fully automatic timing cycle eliminates operator influence of the dwell times.
- Variable load dwell times, 5 – 60 seconds.
- Automatic conversion to alternative scales, eliminating requirement for conversion tables.
- Both indentation diagonal measurements displayed.
- Visual indication of “out of tolerance” results, eliminating operator decisions.
- UKAS accredited test machine, indenter and test blocks.
- Fully CE compliant.
- RS232C and USB output.
- Optional CCD camera and monitor for displaying impressions when measuring manually.
- Optional upgrade for automatic Computer Assisted Measurement System (CAMS).
- Special purpose test fixtures available.



## Model ZHU-A Fully automatic Micro hardness test machine

### Specification

- Range of applications including Micro Vickers and Knoop.
- Capable of performing tests using forces from 10 to 2000gf.
- Capable of fitting both Vickers and Knoop indenters simultaneously.
- Capable of fitting up to four objective lenses.
- Automatic indentation measurement.
- Motorised turret allows automatic test sequence when changing indenter and lens positions.
- Motorised load change controlled via PC.
- Variable dwell times, 5 – 60 seconds.
- Automatic conversion to alternative scales, eliminating use of conversion tables.
- Visual indication of “out of tolerance” results.
- Supplied with X-Y table and precision component vice.
- Both indentation diagonal measurements displayed.
- Fully CE compliant.
- UKAS accredited test machine, indenters and test blocks.
- Options include: motorised tables, automatic effective case depth software, automatic focus and special purpose test fixtures.



## Model HT2000A Hand held portable hardness tester

### Specification

- Easy to use.
- Suitable for testing a variety of materials.
- Compact and lightweight, perfect for testing materials on-site.
- User friendly display.
- Readings in HL, HV, HB, HRC or HSD scales.
- Display of average reading, ultimate tensile strength, test material, test scale and test direction.
- Large memory for test results storage.
- Optional print-out of readings.



## Other machines available include:



**Model 4150BK**  
Rockwell hardness  
test machine



**Model 8187.5LKV**  
Universal hardness  
test machine

**Kemet**

**Zwick / Roell**