

The Tukon 1102 & 1202 Knoop/ Vickers Series Hardness Testers offer a versatile and user friendly solution for a wide range of micro-hardness scale testing. For single scale micro-hardness testing, the Tukon 1102 Tester is equipped with a three position turret which includes one indenter position as well as a 10x and 50x objective. For more demanding applications, the Tukon 1202 Tester is equipped with a six position turret, including two indenter positions as well as 5x, 10x and 50x long working distance objectives. Both units include USB output, eight dial selectable test forces and an innovative touch panel user interface for rapid test method handling and data collection.



Optional Hi Res CCD camera system can be integrated inside the frame - no visible wires

8 dial selectable test forces ranging from 10 grams - 1 kg (2 kg optional)

Motorized 3 position or 6 position turret with "Shortest Path" program logic control.

High quality long working distance objectives providing maximum specimen clearance

LED specimen illumination

Smart UI: Intuitive touch screen interface with hard key buttons for system control

USB output for easy data-export

Applications

- Effect of heat treatment
- Hardness depths of carburized layer
- Steels, non-ferrous metals, IC wafer
- Metallic foils, platings, coatings, surface layers, laminated metals
- Ceramics, steels, non-ferrous metals
- Thin plates, metallic foils, plating, miniature objects
- Hardness resulting from welding or deposition



Tukon™ 1102 & 1202 Knoop/Vickers Hardness Tester

Technical Specifications

Tukon 1102

Tukon 1202

| | | |
|--------------------------------|--|-------------------------------------|
| Hardness Scales | Vickers and Knoop | |
| Test Load (gf) | 10, 25, 50, 100, 200, 300, 500, 1000 (2000) | |
| Test Load Selection | Dial with electronic feedback | |
| Standards Compliant | EN-ISO 6507, ASTM E384 & E92, and JIS | |
| Test Cycle | Automatic (loading/dwell/unloading) | |
| Load Duration (Dwell Time) | 5 - 99 seconds | |
| Automatic Turret | 3 position; 1 indenter, max. 2 obj. | 6 position; 2 indenter, max. 4 obj. |
| Turret Speed | 120° per second | |
| Statistics | Number, Mean, Standard Deviation, Minimum, Maximum and Range | |
| Eyepiece Magnification | 10x | |
| Digital Encoder Resolution | 0.1µm | |
| Total Magnification | 100x, 500x | 50x, 100x, 500x |
| Standard Objectives | 10x, 50x | 5x, 10x, 50x (LWD) |
| Optional Objectives | 5x, 10x, 20x, 50x, 100x (LWD) | |
| Measuring Range | 200µm at 10x | |
| Optical Path | Dual, eyepiece or optional camera | |
| Camera (Optional) | 1.3 MP integrated in pedestal | |
| Specimen Illumination | LED | |
| Display | 5.7 in (144.8 mm) touch screen display, with tab interface | |
| Diagonal Length | 4-digit (d1, d2) | |
| Data Output | USB memory stick (csv format), RS232 | |
| Conversions | Brinell, Vickers, Rockwell and Tensile Strength according to ASTM E140, ISO 18625 and GB | |
| Maximum Specimen Height | 130 mm (4.7 in) / with XY-stage 95 mm (3.7 in) | |
| Depth from Center line | 130 mm (5.1 in) | |
| XY-Stage (Optional) | Size: 100 × 100 mm (3.9 × 3.9 in) Travel Range: 25 × 25 mm (1.0 × 1.0 in) | |
| Operating Temperature Range | 10° to 38°C (50° to 100°F) | |
| Humidity | 10% - 90% non-condensing | |
| Machine Dimensions (L × W × H) | 520 mm (20.4 in) x 230 mm (9.1 in) x 520 mm (20.4 in) | |
| Weight | 40 kg (88.1 lbs) | |
| Power Supply | 110 - 220V AC, 60/50Hz | |



Test Blocks and Indenters

Wilson® Hardness offers a wide range of reference blocks. All certified reference blocks will be issued with a certificate traceable to internationally recognized standards, such as UKAS, DKD, or ASTM.

We also offer certified indenters.



Accessories

- XY-Stage with digital micrometers
- Precision vices, V-blocks and special clamps
- Optional Minuteman automation packages available for complete system integration
- Motorized XY-Stages with onboard virtual joystick for specimen navigation.



Wilson Hardness
Americas • sales@wilson-hardness.com
Asia • asia.sales@wilson-hardness.com
Europe • europe-sales@wilson-hardness.com
www.wilson-hardness.com

We are Local to You

INSTRON ITW Wilson Hardness is an Instron® ITW Company

Wilson Hardness is a registered trademark of Illinois Tool Works Inc. (ITW) Other names, logos, icons and marks identifying Instron products and services referenced herein are trademarks of ITW and may not be used without the prior written permission of ITW. Other product and company names listed are trademarks or trade names of their respective companies. Copyright © 2011 Illinois Tool Works Inc. All rights reserved. All of the specifications shown in this document are subject to change without notice.

POD_1202_REV3_0311