



BUEHLER®
MICROMET® 5103
Microindentation Hardness Tester

- **Digital Hardness Tester with Large Easy-To-Use LCD Console for Tester Control and Hardness Readout**
- **Two Objectives and One Indenter Mounted on a Manual Turret**
- **Precision Digital Filar with 0.01 μ m Resolution Readout**
- **Powerful Halogen Illuminator with Adjustable Aperture Diaphragm and Removable Green Filter**
- **Digital Readout of XY Stage Movement**
- **Data Output from Serial and Centronics Ports**

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Specifications

MICROMET® 5103 Microindentation Hardness Tester, with digital control and an eight step 10gf – 1000gf test load range (10gf, 25gf, 50gf, 100gf, 200gf, 300gf, 500gf, 1000gf). Tester features manual turret rotation carrying two objectives (10x and 50x) and one indenter position with choice of Vickers or Knoop mounted. Direct verification calibration of the tester and included test block is provided to ASTM E 384-99. A digital filar eyepiece provides measurement resolution in 0.01µm for precise measurement of microindentations with the corresponding hardness readings displayed in the large easy-to-read LCD console. Measured hardness values are displayed in Vickers and Knoop according to the indenter in use and can also be displayed as converted hardness values in other scales such as Rockwell. Hardness data from batches of up to 256 indentations may be stored and statistically analyzed with report generation and printing on the maximum, minimum, average, range, standard deviation and number of values within and outside of set limits of hardness. To help with the precise positioning of indentations, the tester also comes with digital readout stage XY movement micrometers with 1" (25mm) travel and 0.0004" (0.001mm) reading resolution. Digital readout of the micrometers can be set to metric or to inches. A 50W halogen illuminator with aperture diaphragm and removable green filter allows the tester to be used as a microscope. The tester comes complete with a comprehensive instruction manual, a sample vise, dust cover and accessory kit containing: video port mount, certified test block, fuse, and tools.

Large font size for the hardness readout and icon driven menu options ensure ease-of-use.

A number of set-up screens are provided for choice of hardness conversion, setting of limits and data output type.

Comprehensive statistical analysis is provided for up to 256 hardness values.

1600-5112 Tester, weight approx 92 lbs. (42kg), Dimensions 16.1" x 23.6" x 23.2" (410 x 600 x 590mm)

Model 1600-5112VA, for operation on 110V 60Hz, mounted with Vickers indenter

Model 1600-5112KA, for operation on 110V 60Hz, mounted with Knoop indenter

Model 1600-5112VKA, for operation on 110V 60Hz, mounted with Vickers, Knoop included in accessory case

Model 1600-5112VD, for operation on 220V 50Hz, mounted with Vickers indenter

Model 1600-5112KD, for operation on 220V 50Hz, mounted with Knoop indenter

Model 1600-5112VKD, for operation on 220V 50Hz, mounted with Vickers, Knoop included in accessory case

Model 1600-5112VE, for operation on 240V 50Hz, mounted with Vickers indenter

Model 1600-5112KE, for operation on 240V 50Hz, mounted with Knoop indenter

Model 1600-5112VKE, for operation on 240V 50Hz, mounted with Vickers, Knoop included in accessory case

Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice.

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BUEHLER ANALYST® SECTION 13



BUEHLER

BUEHLER LTD. – *Worldwide Headquarters*
 41 Waukegan Road • P.O. Box 1
 Lake Bluff, Illinois 60044-1699 USA
 Tel: 847/295-6500 • Fax: 847/295-7979
 Sales: 1/800/BUEHLER • 1/800/283-4537
 Web Site: <http://www.buehler.com>

BUEHLER GMBH - European and MESA Headquarters

In der Steele 2 • 40599 Düsseldorf
 Postfach 16 03 55 • 40566 Düsseldorf
 Telefon: (49) 211 974100 • Telefax: (49) 211 9741079
 Web Site: <http://www.buehler-met.de> • Email: info@buehler.com

BUEHLER FRANCE

Téléphone: 0800 89 73 71 • Télécopie: 0800 88 05 27
 Web Site: <http://www.buehler.fr>
 Email: info@buehler.fr

BUEHLER UNITED KINGDOM

Telephone: 0800 707 6273 • Fax: 0800 707 6274
 Web Site: <http://www.buehler.co.uk>

BUEHLER CANADA

10 Carlow Court, Unit #2 • Whitby, Ontario L1N 9T7
 Telephone: 1-800-268-3593
 Email: info@buehler.ca

BUEHLER ASIA

5/F Vogue Centre • 696 Castle Peak Road
 Lai Chi Kok, Kowloon • Hong Kong, SAR, China
 Telephone: (852) 2307 0909 • Fax: (852) 2307 0233