



BUEHLER® MICROMET® 5104

Microindentation Hardness Tester

- Three Objectives and Up To Two Indenters Mounted on a Motorized Turret
- Large Easy-To-Use LCD Console for Tester Control and Hardness Readout
- 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

BUEHLER® MICROMET® 5104

Specifications

MICROMET® 5104 Microindentation Hardness Tester, with digital control and an eight step 10gf – 1000gf test load range (10gf, 25gf, 50gf, 100gf, 200gf, 300gf, 500gf, and 1000gf). Tester features a motorized turret carrying three objectives (10x, 20x and 50x) and two indenter positions. Choice of either Knoop or Vickers, or both indenter types supplied factory mounted. Direct verification calibration of the tester and included test block is provided. A digital filar eyepiece provides measurement resolution to 0.01µm for precise measurement of both Knoop and Vickers microindentations with the corresponding hardness readings displayed on the large easy to read LCD console. Measured hardness values are displayed in Knoop or Vickers 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 X Y 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 on the micrometer's LCD and in the LCD console. 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 tube, 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.

- 1600-5104** Tester weight approx 92 lbs. (42kg), Dimensions 16.1" x 23.6" x 23.2" (410 x 600 x 590mm)
- Model 1600-5122VA**, for operation on 110V 60Hz, mounted with Vickers indenter only (second position blanked)
- Model 1600-5122KA**, for operation on 110V 60Hz, mounted with Knoop indenter only (second position blanked)
- Model 1600-5122VKA**, for operation on 110V 60Hz, mounted with Vickers and Knoop
- Model 1600-5122VD**, for operation on 220V 50Hz, mounted with Vickers indenter only (second position blanked)
- Model 1600-5122KD**, for operation on 220V 50Hz, mounted with Knoop indenter only (second position blanked)
- Model 1600-5122VKD**, for operation on 220V 50Hz, mounted with Vickers and Knoop
- Model 1600-5122VE**, for operation on 240V 50Hz, mounted with Vickers indenter only (second position blanked)
- Model 1600-5122KE**, for operation on 240V 50Hz, mounted with Knoop indenter only (second position blanked)
- Model 1600-5122VKE**, for operation on 240V 50Hz, mounted with Vickers and Knoop

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

© 2003 BUEHLER LTD. Printed in U.S.A. 32M0203 FN01234 *For metallurgical equipment produced by BUEHLER LTD. USA

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>
 Email: info@buehler.com

BUEHLER GMBH
 In der Steele 2 • 40599 Düsseldorf
 Postfach 16 03 55 • 40566 Düsseldorf
 Telefon: (+49) 0211/974100 • Telefax: (+49) 0211/9741079
 Web Site: <http://www.buehler-met.de>

BUEHLER SARL
 68, Chemin des Ormeaux
 F-69760 Limonest
 Téléphone: (+33) (04) 72 17 92 50 • Télécopie: (+33) (04) 72 17 92 49
 Web Site: <http://www.buehler.fr>

BUEHLER UK
 Milburn Hill Road • University of Warwick Science Park
 Coventry CV4 7HS United Kingdom
 Tel: (+44) (0) 24 7669 2242 • Fax: (+44) (0) 24 7669 3032
 Email: metsales@buehler.co.uk