



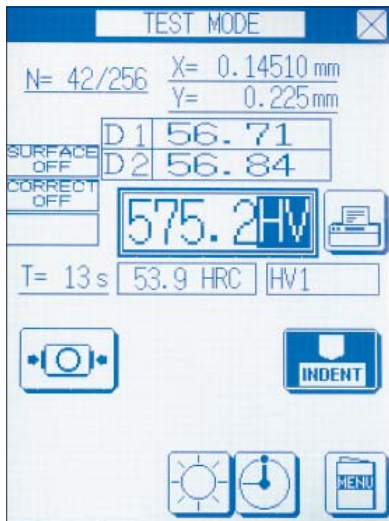
**BUEHLER®**  
**MICROMET® 5114**  
*Microindentation Hardness Tester*

- **Digital Hardness Tester with Large Easy-To-Use LCD Console for Tester Control and Hardness Readout**
- **Extended Load Range of 1gf to 2000gf in 13 Increments**
- **Three Calibrated Objectives 10x, 50x, and 100x to Accommodate a Wide Range of Indent Sizes**
- **Precision Digital Filar with 0.01 $\mu$ m Resolution Readout**
- **Powerful Halogen Illuminator with Adjustable Aperture Diaphragm and Removable Green Filter**
- **Digital Readout of XY Stage Movement**

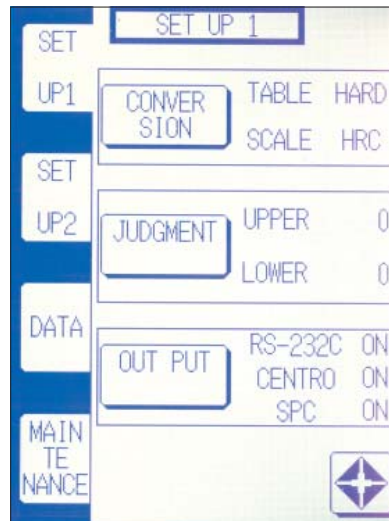
**BUEHLER® MICROMET® 5114**

## Specifications

**MICROMET™ 5114 Microindentation Hardness Tester**, with digital control and a thirteen step 1gf – 2000gf test load range (1gf, 2gf, 3gf, 5gf, 10gf, 25gf, 50gf, 100gf, 200gf, 300gf, 500gf, 1000gf, 2000gf). Tester features a manual turret providing three objectives (10x, 50x, and 100x), and one indenter position with choice of Vickers or Knoop 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 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 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 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. Special electronic test load application at loads 25gf and less to ensure applied load accuracy. 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 a choice of hardness conversion, setting of limits and data output type.**

STATISTICS	
N	10
MAX	814.5
MIN	330.5
AVR	439.6
RNG	484.0
UPPER	0
LOWER	0
GOOD	10
OVER	0
UNDER	0
SD(n-1)	142.00
SD(n)	134.71

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

**1600-5114** Tester, weight approx 92 lbs. (42kg), Dimensions 16.1" x 23.6" x 23.2" (410 x 600 x 590mm)

**Model 1600-5114VA**, for operation on 110V 60Hz, mounted with Vickers indenter

**Model 1600-5114KA**, for operation on 110V 60Hz, mounted with Knoop indenter

**Model 1600-5114VKA**, for operation on 110V 60Hz, mounted with Vickers, Knoop included in accessory case

**Model 1600-5114VD**, for operation on 220V 50Hz, mounted with Vickers indenter

**Model 1600-5114KD**, for operation on 220V 50Hz, mounted with Knoop indenter

**Model 1600-5114VKD**, for operation on 220V 50Hz, mounted with Vickers, Knoop included in accessory case

**Model 1600-5114VE**, for operation on 240V 50Hz, mounted with Vickers indenter

**Model 1600-5114KE**, for operation on 240V 50Hz, mounted with Knoop indenter

**Model 1600-5114VKE**, 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.*

© 2003 BUEHLER LTD. Printed in U.S.A. 32M0203 FN01231 \*For metallurgical equipment produced by BUEHLER LTD. USA

**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-met.de](mailto:info@buehler-met.de)

**BUEHLER FRANCE**  
Téléphone: 0800 89 73 71  
Télécopie: 0800 88 05 27  
Web Site: <http://www.buehler.fr>  
Email: [info@buehler.fr](mailto:info@buehler.fr)

**BUEHLER UNITED KINGDOM**  
Telephone: 0800 707 6273  
Fax: 0800 707 6274  
Web Site: <http://www.buehler.co.uk>  
Email: [sales@buehler.co.uk](mailto:sales@buehler.co.uk)

**BUEHLER CANADA**  
10 Carlow Court, Unit #2  
Whitby, Ontario L1N 9T7  
Telephone: (905) 430-4684 • Fax: (905) 430-4647  
Sales Telephone: 1-800-268-3593  
Email: [info@buehler.ca](mailto: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



**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>