

Buehler Upgrades Wilson® DiaMet™ Software for Hardness Testing

NEWS PROVIDED BY

Buehler →

Jul 29, 2016, 07:59 ET

LAKE BLUFF, Ill., July 29, 2016 /PRNewswire/ -- With a new, extensively upgraded version of its DiaMet™ software, Buehler - (www.buehler.com) is now offering an internationally consistent and even more user-friendly solution for its Wilson® hardness testing systems.

Photo - <http://photos.prnewswire.com/prnh/20160729/394104>

Continue Reading



The new version contains features designed to facilitate and accelerate specific applications, such as the documentation of the hardness distribution in welds, or the depth of hardening in induction-hardened workpieces or objects treated with conventional hardening processes. DiaMet is designed for operation under Windows 10 and can interface with Office spreadsheet applications. It fulfills the requirements for industrial hardness measurement in a production-related environment – an application requiring high precision along with a maximum degree of automation in handling extensive test programs.

Designed for operation by mouse or touchscreen, the system offers expert users the required flexibility and broad feature set for planning, running, analyzing, documenting and archiving of individual measurements and measurement series, whilst at the same time enabling less extensively trained operators to work quickly and efficiently.

DiaMet is optimized for evaluating Macro-Vickers, Micro-Vickers, Knoop and Brinell indents according to ISO 6507, ISO 4545, ASTM E384, ISO 6506 and ASTM E10. It is designed to work with all models of the current Wilson® VH and UH hardness tester series, as well as some legacy systems.

Meets International Requirements

As an international software package offered in multiple languages, the current Wilson® DiaMet™ software addresses all relevant national and international hardness testing standards requirements.

Marcel van Banning, Product Manager Hardness, Buehler ITW Test & Measurement GmbH noted, "DiaMet users in global organizations can now share and compare results worldwide – regardless of where the measurements were made. With this new release, we are providing test engineers with a tool enabling them to supply detailed and reliable results, even when work assignments are time sensitive. In addition, the high degree of automation enables even less trained staff to conduct comprehensive test series and produce highly accurate results."

Facilitates Fast Testing of Welds

The new design of the DiaMet testing software substantially facilitates the process of meeting ISO 9015 and ISO 15614 hardness testing of welds. The software guides the operator through the setup process by adapting a fixed test pattern to the sample in hand with only a few clicks – strictly in accordance with the standards. The software produces a graphical image of the complete weld, including indent positions and associated measurement values, which can be used in a test report.

ISO 9015 and ISO 15614 describe the test loads, number of indents in the parent material, heat affected zone (HAZ) , distances between each indent and the depth below the surface of the welded joint. Fulfilling these test requirements traditionally requires a time-consuming setup and an experienced operator, not least due to the fact that no two weld samples are completely identical. DiaMet saves time and improves accuracy.

Automatic Test Pattern Positioning for Hardened Samples

The testing pattern for induction heated parts consisting of one or more continuous test rows, their geometry and alignment makes the measurement of the depth of hardening of these parts a time-consuming process. The DiaMet software can now recognize any sample that has been tested before and apply the indent rows in the order defined during the first measurement. DiaMet automatically corrects for alignment of the part, thus eliminating the need for the

operator to use fixtures or to perfectly align the sample. Initial user experience has shown that this may cut the time required for testing in half.

Customized Documentation - Surface Hardening Processes

DiaMet™ allows the hardness resulting from conventional surface hardening processes to be determined quickly and with high repeatability through standard measuring sequences. Thanks to the possibility of setting up and storing a virtually endless number of such programs for measuring case-hardening depth, the new DiaMet software provides unsurpassed flexibility. The latest version of the software now offers the ability to respond quickly to changing requirements, allowing standard programs to be adapted to changing requirements on the fly – such as by adding additional indents and/or complete test rows in order to gain higher resolution or increase the reliability of measurements. Conversely, the number of test rows can be scaled down with a simple touch or mouse click for instance when time is running short.

Buehler Offers Diverse Product Range

Buehler's product portfolio comprises a full range of Rockwell, Vickers/Knoop, Brinell and universal hardness testers with numerous options for automation. The Automated Knoop/Vickers Hardness

Testers VH3300 and the VH3100 along with the new micro-hardness testers VH1102/1202 series, the universal hardness tester UH250 includes the new DiaMet hardness testing software.

The company also markets a variety of sectioning and precision sectioning machines optimized for specific applications: Mounting systems, Grinding and Polishing machines, and Consumables for use in materials preparation and image analyses. Buehler products cross a wide variety of industries, including Primary Metals, Automotive, Aerospace and Defense, Electronics, Medical, Energy and more.

For more information on the DiaMet hardness testing software: E-mail marketing@buehler.com or contact Marketing at 847-295-6500.

Media contact:

Perrie Hayes

Email

847-295-4687

SOURCE Buehler

Related Links

