

BOWERS METROLOGY (UK) LTD

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The 'Force' Is With Bowers in 'Testing' Times

Bowers Metrology has announced the launch of a new high-quality Brinell bench hardness tester. Utilising superior load-cell, force feedback technology and closed-loop load application, the cost effective new EW-3001 tester is able to accommodate an extremely wide variety of test loads from 30kgf - 3000kgf.

Traditionally, hardness testing systems have utilised a "dead weight" mechanical design or a relatively inaccurate spring force mechanism, to apply a test force. Such outmoded systems lack test control as they give no feed-back of the actual applied force. Modern closed-loop technology, employing a very accurate force-feedback system, as used in the EW-3001 bench hardness tester, constantly measures and controls the force applied to the tester's indenter. As a result, the EW-3001's superior control system offers an almost unlimited choice of test loads that are suitable for virtually any test condition.

The robust new EW-3001 eliminates system overshoot by the use of sophisticated algorithms that detect contact between the unit's indenter and the tested object's surface. Following initial indenter contact, the application and removal of the chosen test force is completed in a fully automatic test mode. Bowers claim the technology not only guarantees high-accuracy, repeatability and reliability, the new unit's powerful, 32 bits CPU system also gives the user unmatched testing speed. Working in Brinell scale HB 30, 31.25, 62.5, 100, 125, 187.5, 250, 500, 1000, 1500 and 3000 Kgf, Bower's new hardness tester boasts a large multi function LCD display, a high-quality Brinell microscope, and a built-in hardness calculator that sends Brinell hardness values directly onto the unit's clear display. The EW-3001 is also able to supply useful conversions of Brinell hardness values into Rockwell, Vickers, Leeb and tensile strength scales.

Several high-quality options are available, including a precise electronic microscope with a high-resolution encoder allowing the operator to observe indentations and to make easy measurements while maintaining fast and error free operation. By the click of a button, the EW-3001's electronic microscope records the actual diameter of a Brinell indent or the diagonal measurement of a Vickers indent.