

Newage TM
hardness testing

- Reduce cycle time by 50%
- Unmatched accuracy
- Easy set up of traverses
- Numerous report formats

MT91 SERIES

MICROHARDNESS TRAVERSE
TESTING SYSTEM ■

Only the Newage MT91 provides you with:

» Unmatched accuracy

– using precise Rockwell-type testing method

» Unrivalled testing speed

– as fast as six seconds per test cycle

» No operator interpretation of impressions needed

– removes a common source of inaccuracies

» Custom fixturing

– enables measurement of larger samples to further reduce prep time

» Less sample polishing needed

– a 400 grit polish is all that is needed for accurate results

» Easy set up of traverses

– up to 24 traverses for a single procedure

» Numerous report formats

– easy to transfer results internally, as well as to customers



The MT91 specification sheet can be downloaded at hardnesstesters.com. You can also use the QR code to watch our MT91 video.



Ideal for your high-volume applications

The MT91 test cycle is so fast that you can use it for process control – not just quality control. Test reliability is improved since there is no human interpretation of the impression measurement, so operators no longer need to maintain such a high skill levels.

Reduced sample preparation needed

Mounted test samples no longer need the same high level of preparation – or even mounting in some cases. Your case-depth analysis has now become much easier.

Easy setup, operation and reporting

Setting up to test multiple specimens is simply point & shoot. You can set up as many as 24 traverses as part of a single procedure. Complicated staggered traverse procedures are easily created with the graphic setup utility.

Advanced programming tuned to your needs

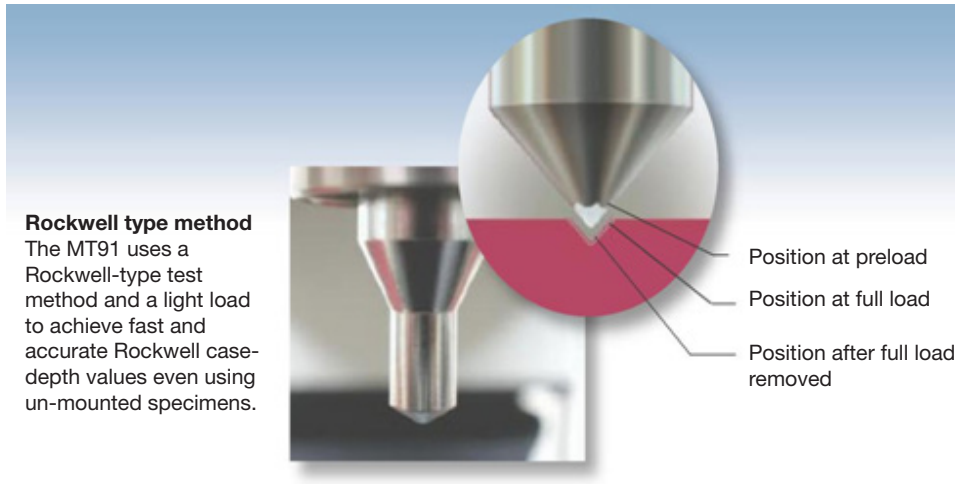
The MT91 software is written and owned by Newage Testing Instruments, which offers significant advantages for users. We often tailor functions so that they can integrate into your company's operations. And since we developed the software, we can offer a level of support unmatched by our competitors.

Meeting your reporting needs

Your test results and part information are stored in a results file. The files can be automatically stored on network drives and complete data files are easily exported.

Rockwell Testing and test surface referencing

The MT91 system follows the Rockwell test principle to obtain test results and is calibrated using NIST traceable Rockwell test blocks. The Rockwell method employs a minor load (or preload) force to slightly indent the surface and establish a good reference-position past irregular surface conditions. An additional test force is applied to reach the major (or full) load. This additional load is held for a period, and then removed, leaving the minor load applied. At this stage the difference in depth of indentation is measured compared to the preload position. The measurement is converted to a Rockwell value.



The photo shows the unique indenter system of the MT91. The indenter is surrounded by the indenter shroud. The purpose of the shroud is to sense the position of the test surface when the preload is applied. Should the sample deflect under major load, the shroud stays in contact with the test surface to maintain a precise reference with the indenter during the measurement. This unique feature also allows accurate measurements in an environment where there are minor vibrations. The MT91 boasts additional design elements that remove friction in the load application that could cause inaccuracies. These unique features combine to give the MT91 the ability, in high-volume applications, to produce test results that are quantifiably better than those obtained by users in their test labs using traditional optical methods.

Quicker crankshaft measurements allows better process control

A major manufacturer of diesel engine crankshafts was spending up to 32 hours – two lab technicians working two days – to section, prep, polish and measure using traditional Micro-Vickers methods, to qualify all the mains and pins on one crankshaft. By installing a Newage automated microhardness tester, they were able to reduce the time spent in every area of the process. The same part is now completed in 8 hours, with improved measurement accuracy as an added bonus. The induction hardening process can now be monitored on a daily, instead of weekly, basis.



About Newage

Newage Hardness Testing is an A2LA accredited organization with a rich history of supplying Rockwell, Brinell and Microhardness hardness testers to virtually every manufacturing sector, including all major automotive manufacturers as well as a host of tier-one suppliers. Newage Hardness Testing is a part of AMETEK Test & Calibration Instruments, which offers expert test solutions for all type of applications.

ABOUT AMETEK

AMETEK Test & Calibration Instruments

A business unit of AMETEK Measurement & Calibration Technologies offering the following industry leading brands for test and calibration instrumentation.

Newage Hardness Testing

Newage offers a comprehensive range of hardness testers, durometers, optical systems and software for measurement, data acquisition and analysis.

LLOYD Materials Testing

Materials Testing Solutions

Materials testing machines and software from Lloyd Instruments guarantee the highest level of performance and capability for production testing, quality control, laboratory testing, research and education to provide expert materials testing solutions.

Davenport Polymer Test Equipment

Allows critical polymer parameters to be determined, including melt flow index and melt flow rate, intrinsic viscosity (IV) measurement of moisture-sensitive PET polymers and polymer density measurement.

Texture Analyzers

The comprehensive program provides the platform to perform rapid, general food testing and detailed texture analysis on a diverse range of foods.

Chatillon Force Measurement

Chatillon has been a hallmark in the industry since 1835. The hand held gauges and motorized testers have earned their reputation for quality, reliability and accuracy and they represent the de facto standard for force measurement.

JOFRA Calibration

The inventor of the portable high precision dry-block temperature calibrators. The calibration instruments program also covers precision thermometers and temperature baths, temperature sensors handheld instruments for pressure calibration and process signal calibrators for easy control loop calibration, measurements and simulation.

M&G Calibration

Pneumatic floating-ball or hydraulic piston dead weight testers with accuracies to 0.015% of reading.

AMETEK®
TEST & CALIBRATION INSTRUMENTS

www.hardnesstesters.com

UK

AMETEK TCI

Tel +44 (0) 1243 833 370

Mail uk-far.general@ametek.co.uk

Germany

AMETEK GmbH

Tel +49 (0) 2159 9136 510

Mail info.mct-de@ametek.de

Singapore

AMETEK Singapore Pte Ltd

Tel +65 6484 2388

Mail ametekdk@ametek.com

Denmark

AMETEK Denmark A/S

Tel +45 4816 8000

Mail ametekdk@ametek.com

USA

AMETEK Measurement & Calibration Technologies

Tel +1 (215) 355 6900

Mail newage.info@ametek.com

China

Beijing • AMETEK Inc.

Tel +86 10 8526 2111

Mail lloyd@ametek.com.cn

France

AMETEK S.A.S

Tel +33 (0)1 30 68 89 40

Mail general.lloyd-instruments@ametek.fr

India

AMETEK Instruments India Pvt Ltd.

Tel +91 22 2836 4750

Mail ametekdk@ametek.com

Shanghai • AMETEK Inc.

Tel +86 21 5868 5111

Mail lloyd@ametek.com.cn

Guangzhou • AMETEK Inc.

Tel +86 20 8363 4768

Mail lloyd@ametek.com.cn