

3816 SERIES - DIGITAL BENCH HARDNESS TESTER

The microprocessor controlled 3816 Bench Hardness Tester offers easy, fully automated testing procedures and provides highly sensitive and accurate readings.

The 3816 can measure the full regular Rockwell Scales according to ASTM and SAE guidelines. It accommodates all types of hard or soft metals and alloys, in numerous configurations. Overall, the 3816 is packed with features and provides excellent value.

The tester is furnished with a diamond indenter, a 1.6mm (1/16") ball indenter, three certified test blocks, four test tables - 149mm (5.87") and 63.5mm (2.5") flat anvils, 15.9mm (5/8") spot anvil and a standard vee anvil, and an accessory case.

- Automated routines reduce operator involvement and speed measurements.
- Large, easy-to-view LED panel displays proper load setting.
- Programmable scale conversions, dwell times and tester counting.
- Sample averaging is automatically calculated.
- With data output.
- Convenient mini-printer for outputting readings.

Technical Specifications	
Major Load	A: 60Kgf, B: 100Kgf, C: 150Kgf
Minor Load	10Kgf
Maximum Test Height	169.9mm (6.69")
Results Display	Digital Readout
Test Force Application	Dead Weight Applies Test Force
Test Force Control	Motorised
Throat Depth	168mm (6.6")
Unit Height / Width / Depth	711 x 226 x 498mm (28" x 8.9" x 19.6")
Unit Weight	85Kgs



Cat No	Description
3816	Digital Bench Hardness Tester

TEST BLOCKS & ACCESSORIES FOR HARDNESS TESTERS

Starrett blocks can be used to test Rockwell, Brinell or Vickers scales. They are available in steel, brass and aluminum. Each block is serialized, with a certificate detailing the environmental conditions used to test the block.

Actual readings are given, with the averages of these readings: min. reading, max reading and a repeatability figure. The blocks are calibrated according to ASTM E-18 standards, ANSI (NCSL) Z540-1, (ISO) 10012-1, ISO/IEC 17025 and Mil-std 45662A.

Starrett hardness test blocks are manufactured from square steel or brass plates, as opposed to the more common round bar stock. The use of plate gives a more accurate and consistent surface for inspection. Metallurgical tests have proved that during the production of round bar stock, suspended carbides in the mix migrate to the center of the rod.

The scientific name for this condition is carbide segregation and results in different readings being found in the center of a rod rather than at its outer edges. Some manufacturers remedy this situation by removing the centers from their blocks.

Hardness test blocks are designed to be used only on one side and the indents should be more than .010" from the centers of two indents or no closer to the block's edge than .040".

Calibration kits are also available from Starrett. No facility with a hardness tester in use should be without a calibration kit. These kits come with from 3 to 20 calibrated test blocks and the serialized penetrator that was used to inspect each of the blocks in the set. When a discrepancy is detected in a tester, these kits allow you to determine the direction to proceed to resolve the issue.



PT05272 HRC 3-Block Master Calibration Kit

Cat No	Description
PT05272	HRC 3-Block Master Calibration Kit
PT05273	HR30N 3-Block Master Calibration Kit
PT05276	HRB 3-Block Master Calibration Kit
PT05277	C&B Scale 20-Block Master Calibration Kit
PT05278	C&30N Scale 6-Block Master Calibration Kit