Mitutoyo

Product details

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Micro Vickers hardness testing machines HM-210 Manual main unit

Item number: 810-401E



Description

This is a high performance hardness testing machine that uses advanced technology and is ideal for quality control. The manual line up of the HM-200 Series has the following benefits:

- 144 mm (5.7 inch) colored touchsreen display (Type A) with higher visibility, easy to operate user interface
- Digimatic output for report creation.
- USB stick data export
- Electromagnetic test force generation system for higher accuracy.
- A high performance optical system provides a high quality image of the indentation load.
 A long working distance greatly reduces the possibility of collision.
- A range of six different objectives: 2x, 5x, 10X, 20X, 50X and 100X for measuring the indentation images.
- LED lighting gives you an observation image in natural colour, with better contrast, as well as longer operation.
- You can set different kinds of conditions on a touch panel, and display test results for easy operation.
- Vickers, Knoop and KC fracture toughness measurement.
- Test force ranges from 0,05g to 2,0kg.

Specification

Test force:	mN: 98.07; 196.1; 294.2; 490.3; 980.7; 1961; 2942; 4903; 9807 (gf) 10; 20; 30; 50; 100; 200; 300; 500; 1000
Indenter / Objective turret:	Motor driven and manual operation
Data output:	RS-232C, Digimatic, USB 2 interface
Standard:	ISO 6507-2, ISO 4545-2, JIS B 7725
Arbitrary test force:	1 type [Default: 245.2mN (25gf)]
Functions:	Calculation of Vickers / Knoop*2 hardness, and ceramic fracture toughness based on IF method (JIS R1697), 3 display format (standard, list, simple), GO/NG judgment, test condition guide, curve and user correction, hardness corresponding value, statistics calculation
Objective lens unit:	Up to 4 pcs. mountable (one mounted 50X as standard)
Output:	Digimatic, serial, USB2.0 series A (for memory)*1, USB2.0 B Type (for system communication)
Resolution of diagonal length of an indentation:	Objective lens less than 50X: 0.1µm (Objective lens more than 50X: 0.01µm)
Test force control:	Electromagnetic generation of force (force motor) and automatic control (load, duration, unload)
Turret drive:	Motor-driven and manual operation
Power supply report:	UN 38.3 Test Summary Report
Control panel:	Built-in touch panel, 5.7" Color LCD (HM-210A/220A for System A), Control software (PC for System B/C/D)
External dimensions Main unit mass:	System A: 315(W)×671(D)×595(H)mm/38.5kg
Specimen dimensions:	System A/B: height 133mm, depth 160mm (when using manual XY stage 25X25)
XY stage [mm]:	Travel range system A + B: 25 x 25 / 50 x 50 manual