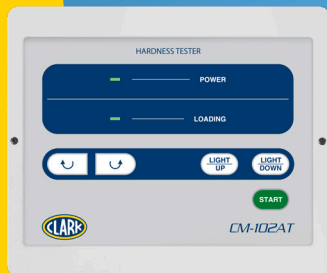


As a variety of new materials are being introduced to the market, the need for Vickers and Knoop micro hardness testing has greatly increased. CM Series Micro Hardness Testers utilize advanced technology for incredibly accurate test results. And for optimum flexibility, combine the CM Tester with our available ARS Software, for a complete automated testing system.

Special Features

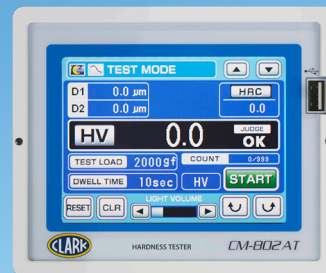
- Built in dial-a-weight system easily changes from load to load.
- Advanced microcomputer with LCD touch panel display (CM-802/CM-802AT)
- Automated test sequence performs easy hands-free loading operation
- Vickers, Knoop, Brinell and fracture toughness (K_{IC}) testing (CM-802/CM-802AT)
- Sharp clear optics provide accurate indentation readings
- Optional dual indenter turret is available with up to 4 objectives on the CM-802 and 3 objectives on the CM-102 and CM-402
- Optional digital micrometer head with CM-802 screen display (CM-802)
- USB output connection (CM-802 Series)
- Built-in LED surface light
- Conforms to tolerances per ASTM & ISO 17025 Standards



Series CM-102 AT



Series CM-402 AT



Series CM-802 AT

MODEL

CM-102 / CM-102 AT

CM-402 / CM-402 AT

CM-802 / CM-802 AT

TEST LOAD gf(N)

Type A:	5 (49.03), 10 (98.07), 25 (245.2), 50 (490.3), 100 (980.7), 200 (1961), 300 (2942), 500 (4903), 1000 (9807), 2000 (19614)
Type B:	1 (9.807), 3 (29.42), 5 (49.03), 10 (98.07), 25 (245.2), 50 (490.3), 100 (980.7), 200 (1961), 300 (2942), 500 (4903), 1000 (9807)
Type C:	1 (9.807), 5 (49.03), 10 (98.07), 25 (245.2), 50 (490.3), 100 (980.7), 200 (1961), 300 (2942), 500 (4903), 1000 (9807), 2000 (19614)
Type D:	1 (9.807), 5 (49.03), 10 (98.07), 25 (245.2), 50 (490.3), 100 (980.7), 300 (2942), 500 (4903), 1000 (9807) or 2000 (19614)
Type E:	1 (9.807), 5 (49.03), 10 (98.07), 25 (245.2), 50 (490.3), 100 (980.7), 300 (2942), 500 (4903), 1000 (9807)

LOADING MECHANISM

Automatic (loading, holding, removing method)

APPLYING LOAD SPEED

55µm/sec

DWELL TIME

5-40 sec

5-99 sec

TURRET MECHANISM

Manual or Automatic Turret (AT)

MICROSCOPE MAGNIFICATION

Measurement: 500X (obj. 50X – eyepiece 10X) — Observation: 100X (obj. 10X – eyepiece 10X)

MEASURING MICROSCOPE

Mechanical

Electronic

Electronic

Max. measuring length

For 100X:850µm / For 500X: 170µm

Min. graduation

Micrometer: 0.5 µm

0.01µm

0.01µm

Min. measuring unit

Eye judgement: 0.1µm

Digital; 0.01µm / In case of 500X

Digital; 0.01µm / In case of 500X

AVAILABLE TEST PARAMETER

HV/HK

HV/HK

HV / HK / HBW / Kc

FRACTURE TOUGHNESS TEST

Conforms to JIS R1607 / IF method

DATA DISPLAY

Power / Loading

D1 / D2 / HV-HK / Hardness Value /
Loading / OK-NG CriteriaD1 / D2 / HV-HK / Hardness Value /
Conversion Data / OK-NG Criteria

DATA OUTPUT

D1 / D2 / HV-HK / Test Load / OK-NG

D1 / D2 / HV-HK / Test Load / OK-NG
Conv. Scale / Conv. Data / Statistic Data

HARDNESS CONVERSION

ASTM (E-140)

OK/NG CRITERIA

Limit setting and HI / OK / LO display

ACCURACY

Conforms to tolerances per ASTM E-92, ISO 6507-2, ISO 4545-2

DIMENSIONS OF X-Y STAGE

100 x 100mm

MAXIMUM MOVEMENT

25mm in X & Y axis

MINIMUM MICRO GRADUATION

1/100mm

MAXIMUM HEIGHT OF SPECIMEN

3.75" (95mm)

MAXIMUM DEPTH OF SPECIMEN

4.5" (115mm)

DIMENSIONS

7.3 x 17.7 x 19.8 in / 186 x 450 x 504 mm

WEIGHT

Aprx. 85 Lbs / 39 kg

POWER SUPPLY

120 VAC 1Ø 2A / (AC 100~240V) Please Specify

STANDARD ACCESSORIES

Hardness Standard, Manual X-Y Stage, Diamond Indenter, Measuring Microscope, Objective Lens (x50, x10)

Hardness Conversion Table (CM-102), Indenter Cover, Accessory Box, Machine Cover, Accessory Box, Manual, Leveling Legs



Optional dual indenter auto-turret
allowing up to four objectives.
(Available on CM-802 series only.)

HV
HK
HB
Kc

NDT Supply.com, Inc.
7952 Nieman Road
Lenexa, KS 66214-1560 USA

Phone: 913-685-0675, Fax: 913-685-1125
e-mail: sales@ndtsupply.com, www.ndtsupply.com



* Please specify when ordering.
Appearance and specifications are subject to change without prior notice.