

# United Service Company Inc

Sales and Service  
West Hartford, CT 06110  
(860) 667-4403  
[www.unitedservice.us](http://www.unitedservice.us)

## Introducing the new **Clark CM Series**

As a variety of new materials are being introduced to the market and products continue to be downsized, the significance of micro hardness testing has increased dramatically. CM Series Micro Indentation Hardness Testers are amazingly accurate, utilizing advanced technology with an emphasis on user friendliness. Combine the CM Series with the available automated system (ARS) for flexibility that grows as your needs do.

### Special Features

- Built in dial-a-weight system easily changes from load to load
- Advanced microcomputer with LCD touch panel display (CM-800/CM-800AT)
- Automated test sequence performs easy hands free loading operation
- Vickers, Knoop, Brinell and fracture toughness (Kc) testing (CM-800/CM-800AT)
- Fine measuring lines in microscope provide accurate indent readings
- Turret allows up to 3 different objectives attached at once (4 on CM-800)
- CM-800 models are available with dual indenters (Knoop and Vickers)
- Unique light source with interchangeable color filters for clear viewing
- Certified and ready to use



CM 100/CM-100(AT)



CM 400/CM-400(AT)



CM 800/CM-800(AT)

United Service Company Inc is an ISO-17025 certified company with well over 100 years combined experience providing service and recommending the correct machine for your needs. Our major objective is to supply to our customers the best products, advice, and on-time service possible.

**Call for a no cost, no obligation quote today!**

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ITEM	CM-100/CM-100(AT)	CM-400/CM-400(AT)	CM-800/CM-800(AT)						
Test Load	Type A	10	25	50	100	200	300	500	1000 gf
	Type B	5	10	25	50	100	200	300	500 gf
	Type C	25	50	100	200	300	500	1000	2000 gf
	Type D	1	5	10	50	100	300	500	1000/2000 gf
Loading Mechanism	Auto-load and release method								
Applying Load Speed	50 $\mu$ m								
Dwell Time	5 - 40 seconds				5 - 99 seconds				
Turret Mechanism	Manual / Automatic								
Microscope Magnification	Measurement: 500x (obj. 50x - eyepiece 10x) - Observation: 100x (obj. 10x - eyepiece 10x)								
Measuring Microscope	Mechanical			Electronic			Electronic		
Max. measuring length	For 100x: 850 $\mu$ m / For 500x: 170 $\mu$ m								
Min. graduation	Micrometer: 0.5 $\mu$ m			0.01 $\mu$ m			0.01 $\mu$ m		
Min measuring unit	Eye judgement: 0.1 $\mu$ m			Digital: 0.01 $\mu$ m/In cae of 500x			Digital: 0.01 $\mu$ m/In cae of 500x		
Available Test Parameter	HV / HK			HV/ HK			HV / HK / HBw / Kc		
Fracture Toughness Test	Conforms to JIS-R1607/IF method								
Operation Panel	Touch Pad			Touch Pad			LCD Touch Panel		
Data Display	Power / Loading			D1 / D2 / HV-HK / Hardness Value / Loading / OK - NG Criteria			D1 / D2 / HV-HK / Hardness Value / Loading / OK - NG Criteria		
Data Output				RS232C/CENTRONICS/ D1 / D2 / HV-HK / Test Load / OK - NG			RS232C/CENTRONICS/ D1 / D2 / HV-HK / Test Load / OK - NG Conv Scale / Conv Data / Etc.		
Hardness Conversion	ASTM E-140								
Data Memory	Max. 999 Tests								
OK/NG Criteria	Limit setting and HI / OK / LO display								
Accuracy	Conforms to ASTM (E-384), ISO/DIS 6507-2, JIS B-7734/B-7725								
Photographic Devices	Built-in optical path and can be mounted at any time								
Dimensions of X-Y Stage	100 x 100 mm								
Maximum Movement	25 mm in X & Y axis								
Minimum Micro Graduation	1/100 mm								
Maximum Height of Specimen	3.75" (95 mm)								
Maximum Depth of Specimen	4.5" (115mm)								
Dimensions	Approximately 186 x 450 x 504 mm								
Weight	Approximately 85 lbs								
Power Supply	Single phase 115 VAC / AC 100-240V 50/60HZ								
<b>STANDARD ACCESSORIES</b>									
Hardness Standard	1								
Diamond Indenter	1								
Measuring Microscope	1								
Built In Objective Lens (10x and 50X)	1 each								
Manual X-Y Stage	1								

All units also include: Machine Dust Cover, Bulb, Tools, Manuals, Leveling Leg Set