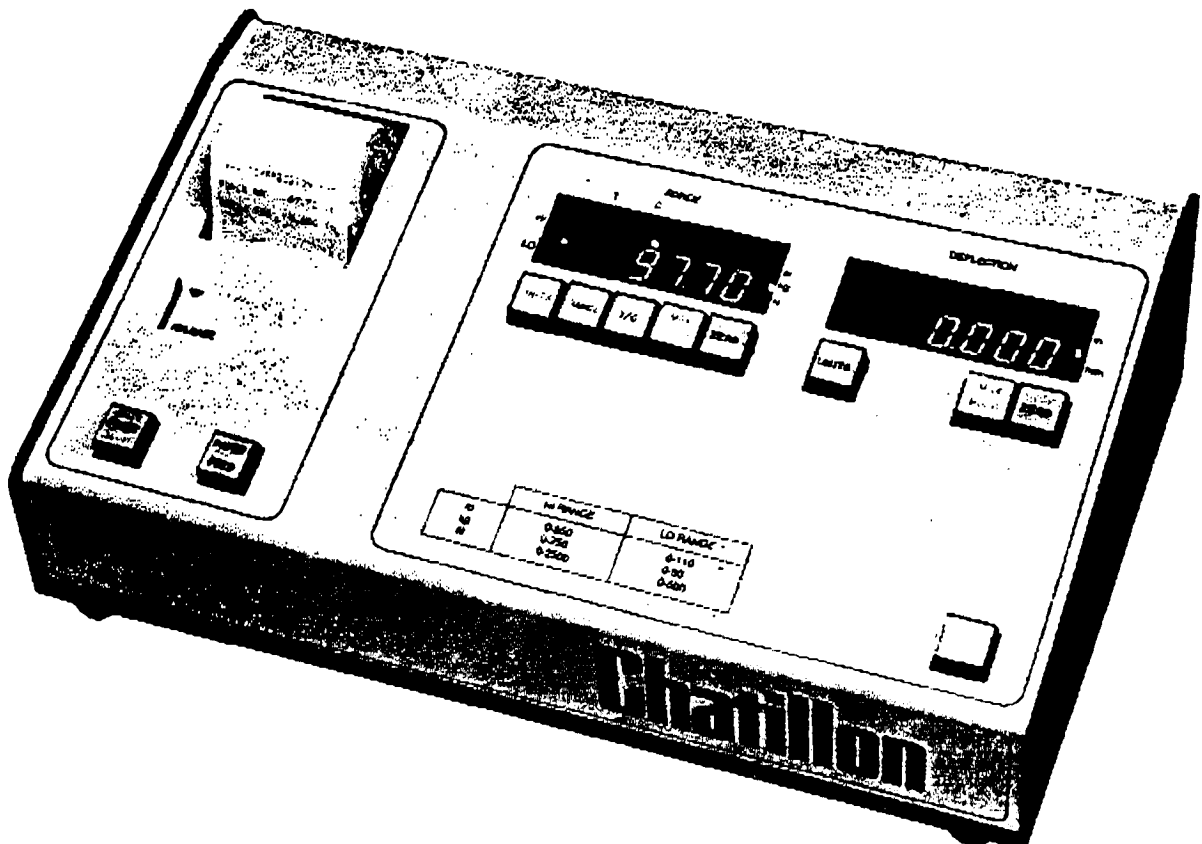


## UNIVERSAL ELECTRONIC TESTER MODEL UTSE-2

The UTSE-2 is a Universal Tension and Compression Test instrument designed to determine the resiliency, yield points and breaking strengths of various materials. Rated at 550 lb-f (250kg, 2500N), this tester features:

- Micro-Processor Based
- Loadcell Deflection Compensation
- Digital LED Displays
  - FORCE
  - DEFLECTION

- Hold of Maximum Readings
- Speed Control between 1 and 12 in per min
- Push Button Selection of Units (lb,kg,N,in,mm)
- Force Range (HI/LO) Selection by pushbutton
- Digital Output (RS232-serial and Centronics-parallel)
- Analog Output for X-Y Recorder
- Integral 20-Column Thermal Printer
- Temperature-Compensated Load Cell



# SPECIFICATIONS

## 1. MECHANICAL

VERTICAL OPENING—maximum distance between compression plates is 20 inches.

HORIZONTAL OPENING—clear opening between columns is 8 inches.

CROSSHEAD TRAVEL—6½ inches total.

CROSSHEAD SPEED—adjustable from 1" to 12" per minute. Speed is held constant within 5% of max. speed under varying load.

## 2. DIGITAL DISPLAYS: 9/16" red LED

FORCE (5 digits)

	<u>LOW RANGE</u>	<u>HIGH RANGE</u>
lb	0-110.00 x 0.01	0-550.00 x 0.05
kg	0-50.000 x 0.005	0-250.00 x 0.02
N	0-500.00 x 0.05	0-2500.0 x 0.2

DEFLECTION (5 digits)

in	0-6.500 x 0.001
mm	0-165.00 x 0.02

## 3. ACCURACY

FORCE: ± 0.2% F.S. each range  
± one count.

DEFLECTION: ± 0.25% F.S.

SPEED OF TRAVEL: ± 5% of max. speed.

## 4. TARE ADJUSTMENT:

Sample and/or Fixture Weight can be removed from the displayed force value using the pushbutton zero. Up to 10% of the maximum force of the tension range in use can be tared out using the pushbutton zero without affecting the net capacity of the tester. Tare adjustment between 10% and 120% of capacity can be made via the same pushbutton with a resulting reduction in net capacity equal to the amount of the tare.

## 5. ANALOG OUTPUTS

For XY recorder with 0.5 Megohm impedance min

FORCE:	0 ± 550 lb = 0 ± 6.7	Vdc (approx)
	0 ± 110 lb = 0 ± 1.3	Vdc (approx)
DEFLECTION:	0 ± 6½ in = 0 ± 81	Vdc (approx)

## 6. DIGITAL OUTPUT

A 30-pin connector on the back of the display cabinet provides digital output that is compatible with most parallel (Centronics) printers, serial printers or computer (RS232) interfaces.

## 7. LOAD CELL PROTECTION

The overload circuit breaker in the test stand trips and stops the motor long before the applied force reaches the safe load limit of the load cell.

## 8. MAX. HOLD/FORCE

When engaged, force display shows the largest value encountered during a test.

## 9. MAX. HOLD/DEFLECTION

When engaged, deflection display shows the value at which MAX. FORCE occurred. (Active only when MAX. HOLD/FORCE is also engaged.)

## 10. POWER REQUIREMENT

Test stand 115 Vac—50/60 Hz—5A

Display cabinet 115 Vac—50/60 Hz—0.5A

## 11. STANDARD EQUIPMENT

550 lb loadcell

Compression Plates

Tension Clevises (1 pair)

220 Volt operation (specify with order)

## 12. OPTIONAL EXTRAS

55 lb loadcell

Extended columns—39" or 60"

Longer Stroke—30"

High speed motor—2½ to 24 in/min

Slow speed motor—¼ to 3 in/min

Gripping fixtures

XY Recorder

Printer

# John Chatillon & Sons Inc.