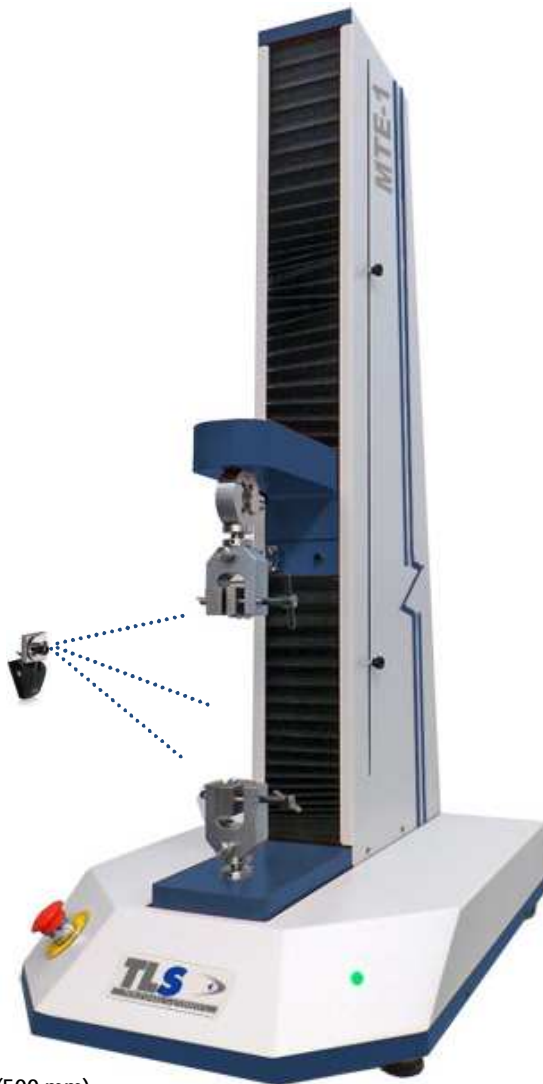


## MULTITESTERS MTE-1 & MTE1-L models

To measure tensile breaking strength and elongation  
Other possible tests (compression - tear - static and dynamic friction ...)

Applicable standards: ISO 1924/2 - ISO 3781 - ASTM D 828 - SCAN P38 - TAPPI T494 - PAPTAC D34 - DIN 53112

*"Data in Real Time..."*



Video Capture testing area systems included



- MTE-1 (500 mm)
- MTE-1L (800 mm)

15" Laptop PC + LYNX Universal Testing Software + LYNX Management Module with basic statistics included

### TEST DESCRIPTION

After placing the sample into the grips the test starts by pressing the start button. After measuring is completed the upper movable grip returns back to the initial starting position and the equipment is ready for the next test

With LYNX testing software, the numerical, breaking strength graphics and elongation values in % are shown in the test menu on the PC. It is possible to keep these data for future management, statistic calculus, gauss bells, dispersion curves, tendencies...

- q 15" Laptop PC (4Gb DDR+500Gb D. Duro + O.S. Windows 10 Home Edition ) interface - for Control and Data Acquisition
- q LYNX Universal Testing Software LYNX included (\*)
- q Statistics: Min, Max, Average, Standard Deviation, Gauss Bells, Tolerances and Bars
- q Save – Print – Copy to Office Clipboard...
- q Languages included: English - Spanish - German and French
- q Easy to use
- q Robust and highly accurate
- q Standard load cell of 1000 N (optional 500 – 250 – 100 – 50 y 10 N)
- q USB interface f/connection to a PC
- q Optional: Manual and Pneumatic grips available (optional) width of 15 – 25,4 – 50 mm  
Testing devices available : Friction – “Finch” Wet tensile – Puncture
- q Including interface USB
- q (\*) It is possible to integrate in: Advanced Management Laboratory Software LYNX Plus & Pro (f/multiple test equipment connection)

## FUNCTIONAL SPECIFICATIONS:

### CONTROL UNIT

- q PC Control and Universal Testing Software
- q Statistics: Average and standard deviation
- q Overload protection
- q Quick return to initial start position
- q Breaking level programmable
- q Units Selection: Kg - N or Lb
- q USB port f/connection to a PC

### STRENGTH MEASURE

- q Range: 2% a 100% - Accuracy 0,5% the force applied
- q Force Accuracy: Class 0.5 ( $\pm 0.5\%$  accuracy)
- q Load readings Resolution: 1 / 200.000 points:  
- 1 / 100,000 in Tensile  
- 1 / 100,000 in Compression
- q Speed Data Sampling Force (internal): 30.000 S / second
- q Tara digital load 20% load cell at maximum capacity
- q Select units: Newton - Kilograms and Pounds
- q Protection System load cell
- q Programmable Pre-load
- q High Speed Converter A / D 18 bit

### STROKE MEASURE (Mobile Crosshead)

- q Direct measurement from the screws drive
- q Single measurement range (1 scale)
- q Reading resolution:  $\pm 0.05$  mm
- q Precision auto-return, better than 0.05 mm
- q Select units: millimeters and inches
- q Programmable extension limits

### CONTROL DE VELOCIDAD

- q Variable speed range (see table)
- q Preload variable speed within the range (see table)
- q Variable speed return within range (see table)
- q Speed resolution:  $<0.02$  mm / minute
- q Speed accuracy:  $<\pm 0.5\%$
- q Power Protection System
- q Drive by servo motor



**MULTITESTERS computer controlled**

MTE-1 & MTE-1L models of electronic universal testing machines have the most advanced and reliable structures in electromechanical testing frames circulating ball screw. The computerized control system allows the closed loop control of parameters such as test force, deformation of the specimen and crosshead stroke... The system performs real-time on the PC screen test charts, test curves and test reporting.

**STANDARDS:** Meets or exceeds the requirements of the following standards: ISO 7500-1, ASTM E4, EN10002-2, BS 1610, DIN51221, ISO6892.

Computerized MULTITESTERS MTE-1 & MTE-1L models are made of a sturdy frame which is under testing.

The test frame is composed of 1 screw drive spindle and ball recirculation with protective, low friction coefficient and one column guide, chromed steel and ground.

In the mobile crosshead it is placed a load cell tension-compression, which test the tools employees (not including with the test frame).

This set of elements is oversized overload can admit 120% of nominal without affecting measurement accuracy or operation, which gives the frame a great robustness and security operation to correct labor intensive.

System has a limiter upper run and lower independently adjustable by the user.


Inside the box base transmission elements, transformer, control electronics, servo motor, etc. include

**CHARACTERISTICS:**

- ü Fully computerized: The measurement and control system with electronic board used for specific testing machines, realizing the tare to zero and adding an adjustment which is very reliable.
- ü It has a Database Manager for test results which stores according to a standard format which facilitates the analysis and transfer to other programs.
- ü Compliance testing requirements for all materials with all international testing standards.
- ü With a wide range of functions in the graphics, you can make changes color curves, magnification (zoom), reductions, auto-scaling of the curves (which facilitates and shortens the testing of a new material), displacement curves in the axis of deformation, designate standard curve, an association of tags to each graphic, indicating the values digitally on the screen and printing all kinds of test curves.
- ü The modular design facilitates the software upgrade in the future.

Model	MTE-1	MTE-1L
Capacity	1 KN	
Resolución en Fuerza con Célula de Carga de 1kN	0,01 N	
Stroke resolution	0,001 mm	
Crosshead stroke	500 mm	800 mm
Standard speed range	0,5 – 1000 mm /min.	
Maximum speed of return to starting position	1500 mm/min	
Maximum distance between fixings test useful (adaptadors)	500 mm	800 mm
Power supply	220V / 50Hz - 110V/60Hz Monofásica.	
Consumption	400 W	
Environmental condition working	10 °C ~ 35 °C 20% -80%	
Testing frame size approx.	420 x 670 x 950 mm (W x D x H)	420 x 670 x 1250 mm (W x D x H)
Net weight approx.	64 Kg	82 Kg.
Wooden box for transport	550 x 870 x 1250 mm	550 x 870 x 1550 mm
Gross weight approx.	110 Kg	130 Kg.

Testing tools - OPTIONAL




**PNEUMATIC GRIPS**  
 § Capacity 200N  
 § Suitable clamping system in order to avoid sample sliding  
 § Adjustable width through centering: 50 - 25,4 y 15 mm



**MORPNEUMATIC GRIPS**  
 § Capacity 1 kN  
 § Suitable clamping system in order to avoid sample sliding  
 § Adjustable width through centering: 50 - 25,4 y 15 mm

**MANUAL GRIPS**

- Apriete manual
- Anchos disponibles: (15 - 25 / 25,4 ó 50 mm)



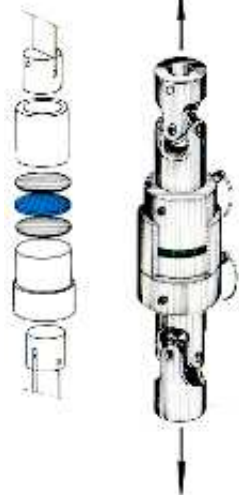
ISO 1924/2 - ISO 3781 - ASTM D 828 - SCAN P38 - TAPPI T494 - BS 4415/2 - PAPTAC D34 - DIN 53112



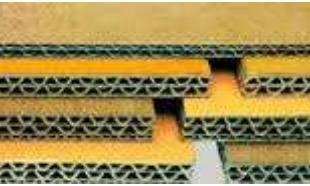
**"FINCH" TEST DEVICE**  
 (WET Tensile Test)  
 TAPPI T 456 om-03

**"BOND" TEST**  
 (z-Direction Tensile)


TAPPI T 541om-10 - ISO 15754






TAPPI T 836 om-02 - TAPPI T 820 - DIN 53121

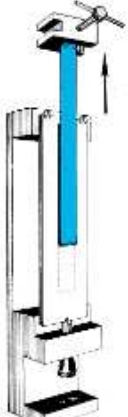
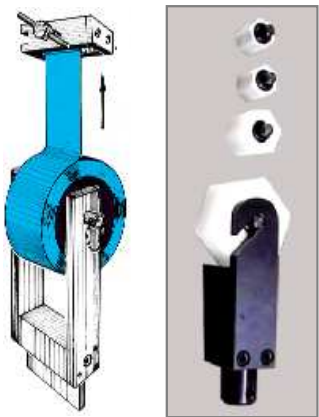
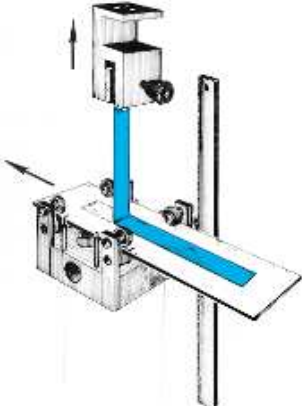







**3 & 4 Point FLEXURAL / BENDING**  
 (Corrugated Board)




**COMPRESSION PLATES**  
 § Square  
 § Rectangulars  
 § Circulars

<p>90° ADHESION TESTING DEVICE (Adhesive Tapes)</p> <p>AFERA 4013 P1 FINAT FTM-1 FINAT FTM-3 EN 1939</p> 	<p>UNWINDING ADHESION TAPES (Adhesive Tapes)</p> <p>AFERA 4001 P7</p> 		
<p>90° ADHESION TESTING DEVICE (Adhesive Tapes)</p> <p>AFERA 4015 T4 - FINAT FTM-2</p>  			
 <p>"SQT" SCORE QUALITY TEST (Flexión Creasing Lines)</p> <p>TAPPI T 829</p>	 <p>TENSILE TEST "ZERO SPAN"</p> <p>TAPPI T 231cm-07</p>	 <p>FRICITION TESTING DEVICE</p> <p>ASTM D1894 (method B) TAPPI T816, T549</p>	 <p>OPENPACK TESTING DEVICE (Boxes/Cases Folded)</p>

CONNECTION:

Electrical: 110V/60Hz or 230V/50Hz, Single-phase

Dimensions MTE-1:	420 x 670 x 950 mm (W x D x H)
Box for transport MTE-1:	550 x 870 x 1250 mm (W x D x H)
Net/Gross weight MTE-1:	64 Kg / 110 Kg
Dimensions MTE-1L:	420 x 670 x 1250 mm (W x D x H)
Box for transport MTE-1L:	550 x 870 x 1450 mm (W x D x H)
Net/Gross weight MTE-1L:	82 Kg / 130 Kg

DELIVERY CONTENT:

- > MULTITESTER MTE-1 or MTE-1L
- > Load Cell selected (10-50-100-250-500-1000 N)
- > Laptop PC 15" w/ O. S. Windows 10 Home Edition
- > LYNX Universal Testing Software
- > LYNX Managemen Module with Basic Statistic

\* The standard supply does not include the grips and other test devices

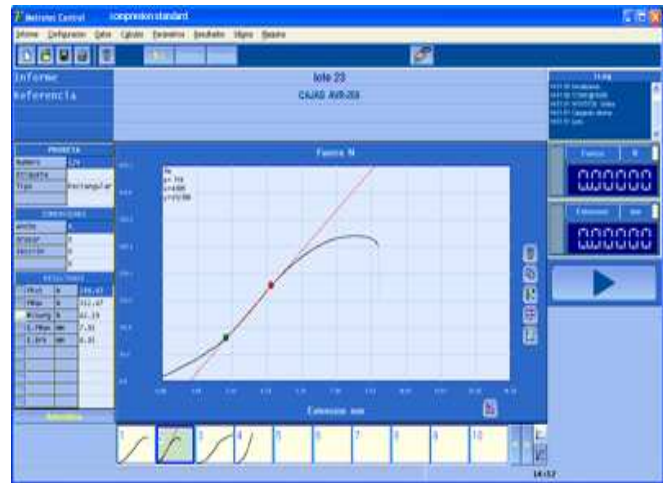




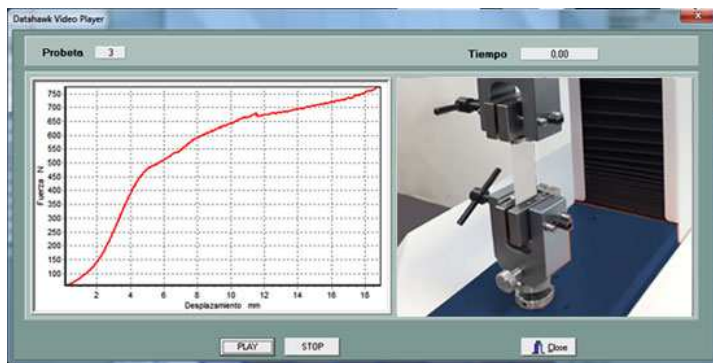
**LYNX Universal Testing Software**  
**TENSILE – COMPRESSION – BENDING – FRICTION and TEARING Tests**

*“Data in Real Time...”*

- q Quickness carrying out tests and obtaining results
- q No human mistakes
- q Traceability according to ISO 9000



- q It marks Maximum-Minimum-Medium Values and Standard Deflection
- q Up to 100 tests storing capacity for each report
- q SAVE-PRINT-OFFICE CLIPBOARD FUNCTIONS – Reports in PDF format



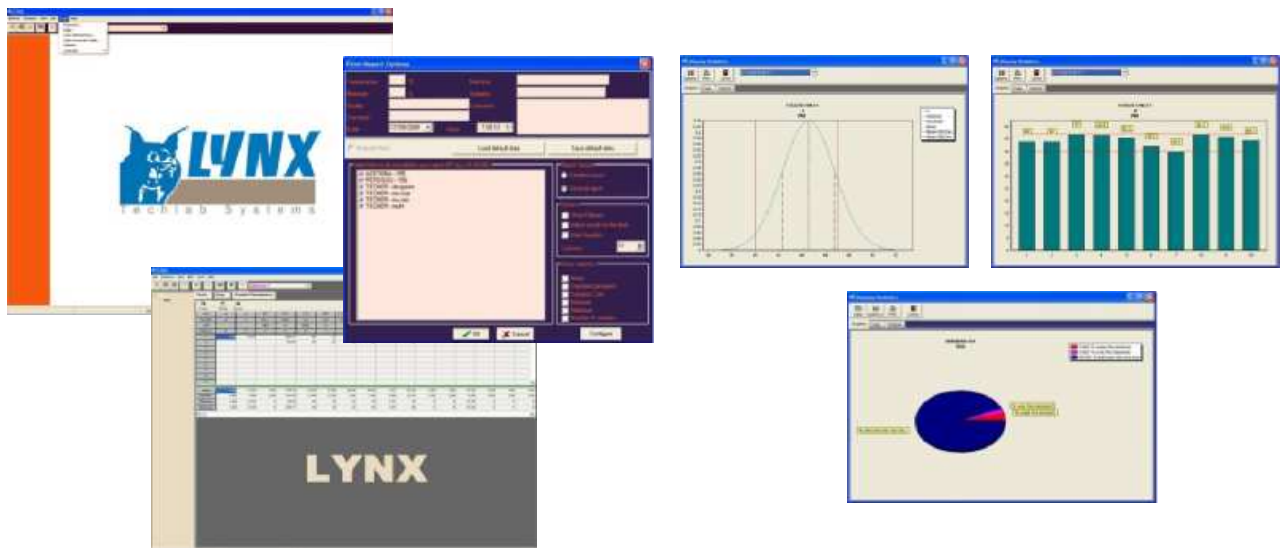
THE STANDARD DELIVERY INCLUDES:

- VIDEO-CAPTURE Testing System (hardware + software)

Allows the video recording during a Tensile, Compression, Flexion... test through a webcam, the video being linked to the test

INCLUDED : **LYNX MANAGEMENT MODULE** with Basic Statistics

The LYNX Management Module allows you to manage the data generated, choose the interface language, prepare and print reports that you can customize with your logo, change the testing units, different user password levels, introduce the minimum, maximum and optimal values to manage data with statistics, charts bars, GAUSSEN Bell, tolerances comparatives, export data to Word - Excel ..., PDF generation and more.



\* TECHLAB SYSTEMS reserves the right to do any technique modification without advance notice

Doc. : LYNX\_Universal\_Testing\_Software-1-CAT-I-R1