

# DYNAMIC MODULUS TESTER LH-551, LH-552



The Dynamic Modulus Tester is a complete system that measures Sonic Velocity through materials. Physical properties derived from sonic velocity include modulus of elasticity, material anisotropy, molecular orientation in fibers and films as well as orientation of fibers in a web.

## APPLICATIONS

Yarns such as Carbon, Glass, Polyester, Nylon, Tapes, Monofilament, or strips of most materials including Nonwovens

## ADVANTAGES

- Small, table-top instrument for very quick and accurate measurement of sonic velocity through materials such as yarns, fibrous webs, films, tapes, paper and others
- Excellent tool for Production Control and R&D
- Non-destructive testing for most materials
- Same machine can be used to test both yarns and material strips by changing the sample mount

## FEATURES

- Digital display of the transit time through material
- User friendly software program that calculates the sonic velocity automatically
- Fiber Scanner option for yarn and Planar Mount option for sheet material testing

## OPERATION

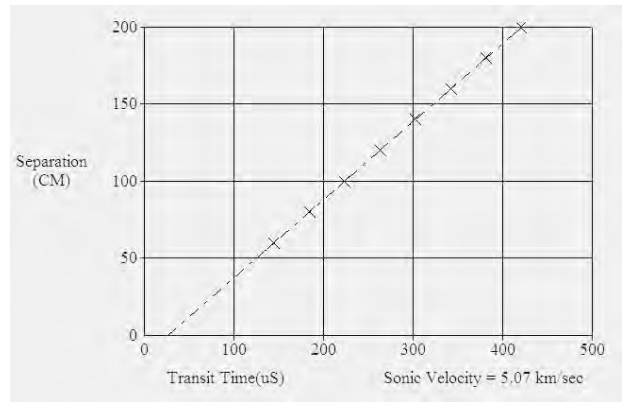
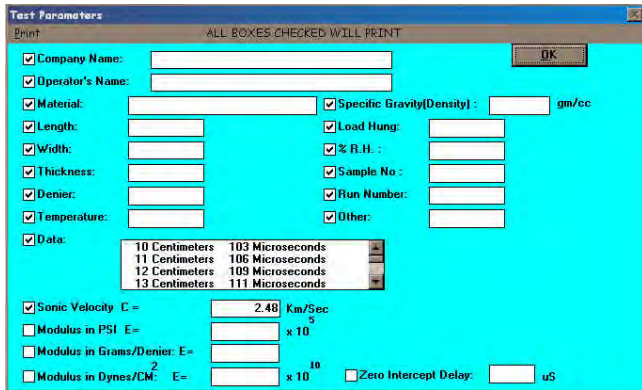
The Dynamic Modulus Tester is a complete system that measures the velocity of the sonic pulses in materials such as yarns, films, tapes, non-wovens, and papers. The test materials is contacted by two transducers. The DMT software calculates the sonic velocity, which is used to measure the physical and chemical structure of materials.

## OTHER USES

- Evaluation of experimental materials
- Production quality control
- Research, Assist in product development

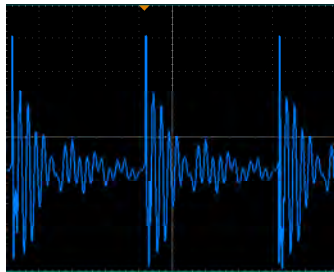
# DMT SOFTWARE SCREENS

The Dynamic Modulus Software will calculate a variety of Modulus results after the manual entry of the Distance and Velocity data is made at the Active Data screen. Below are screen shots of the software and the test report.

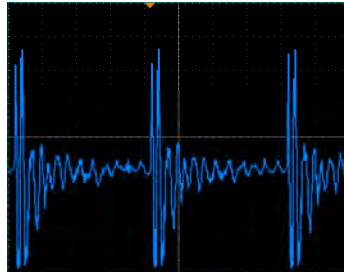


▲ Sonic Velocity Measurement for Steel Wire

## SONIC VELOCITY MEASUREMENT FOR VARIOUS MATERIALS



NYLON CORD  
3.63km/sec



UHMPE  
7.59km/sec



PARAARAMID  
7.23km/sec

## ORDERING INFORMATION

LH-551 DMT Fiber Scanner Option with V-shaped crystals for testing natural and synthetic yarns such as cotton, polyester, nylon, elastomeric, etc.

LH-552 DMT Planar Mount option with round tip crystals for testing film, tape, paper, thin strips of most materials. Insulated probes available for wet material testing.

## INSTRUMENT SIZE (TEST BED)

Dimensions: 91 cm x 48 cm x 48 cm (36 in x 19 in x 19 in )  
Weight: 17kg (37lbs.)

*Contact us today for more information on the Dynamic Modulus Tester or any Lawson Hemphill product,  
Please call us at 1-508-679-5364, or e-mail: [information@lawsonhemphill.com](mailto:information@lawsonhemphill.com)*

Please visit our website at  
[www.lawsonhemphill.com](http://www.lawsonhemphill.com)



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