

MTT175 – Miniature Tensile Tester



The Dia-Stron MTT175 is a flexible Miniature Tensile Tester to measure different properties of hair tresses, including: Combing, Volume, Friction, Curl Compression, 3-point bending and Tensile.

General Information

Principal benefits

- Multi-purpose instrument
- One unit with multiple applications
- Small footprint & low weight
- Easy to set-up and to use
- Low maintenance & robust

Hair Testing Applications

- Tress Combing and Volume
- Curl Compression and 3-Point Bending
- Hair and Substrate Friction
- Product Tack and Adhesion
- Single Fibre Tensile

System Description

The MTT175 is our entry level instrument of the advanced tensile tester portfolio. It features a range of accessories supporting a number of applications and claims on hair tresses. Its integrated approach to hair testing, from sample mounting to data analysis, makes it the ideal instrument for multiple claim support.

The MTT175 is supplied as a standalone system and accessories can be purchased on an individual basis when necessary, giving greater flexibility when different applications and claims are required.

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Accessories

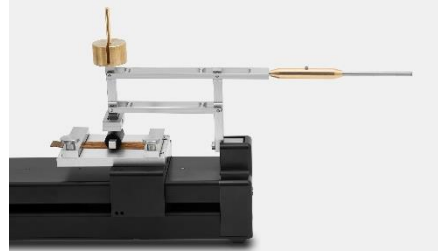
Combing

Measures combing force. Hair combing properties correlate well with subjective attributes including 'ease of combing' and 'detangling'.



Friction

Measures tribological properties of hair in the wet and dry. This accessory is suited to 'smoothness' claims.



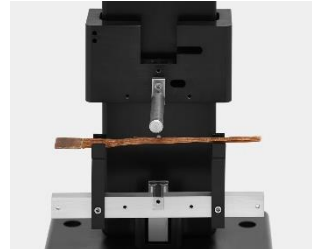
Tress Volume

Designed to estimate body/volume of hair tresses. This accessory is ideal for 'body' or 'volume' claims.



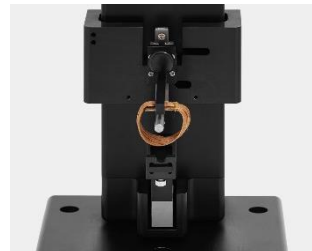
3-Point Bending

Bending properties associate well with end user attributes including 'hold', 'elasticity' or 'feel'.



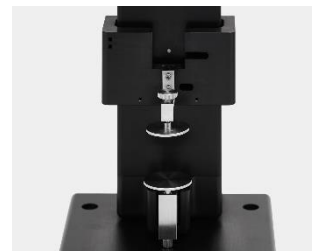
Curl Compression

Measures the compressibility properties of hair curls. This accessory can be used for 'softness' or 'retention' claims.



Tack/Adhesion

Designed to measure the adhesion of a product between two circular plates. Used to measure extensional rheology properties such as 'stringiness' and 'string break'.



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Specifications

Dimensions & weight:	L 700mm x W 90mm x D 70mm (6Kg)
Extension range:	0 – 300 mm
Standard speed range:	1 – 2000 mm/min
*High speed range:	10 – 5000 mm/min
Displacement resolution:	1 μ m
Displacement accuracy:	50 μ m
Standard force range:	up to 2000 gmf (20N)
Standard force resolution:	0.05 gmf
*Extended force range option:	up to 5000 gmf (50N)
*Extended force range resolution:	0.125 gmf
Methods:	Extension & Compression
Software:	Windows 7, 8 or 10 (32 or 64 bit)
Communication:	USB
Power:	75W
Voltage:	Universal supply 85-265vac
Frequency:	47-63Hz
* Special Order Option	

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