



Overview

The Dia-Stron Rental Scheme offers a flexible, cost-effective solution for customers to rent Dia-Stron standalone skin, hair tress or fibre measurement systems on a month-by-month basis from a minimum of one month.

All Dia-Stron rentals are delivered as a full package with start-up consumables, allowing customers to commence their work quickly and efficiently. Remote training, installation and ongoing support are provided throughout the rental period, with the option to purchase the instrument at any time by converting to a sales agreement.

Rental Scheme benefits

- Systems arrive ready to use 'out-of-the-box'
- Comprehensive rental price inclusive of remote training and installation, support, start-up consumables
- Easy to budget monthly payments
- Option to purchase system



Combing —

Combing measurements provide information about the conditioning performance of a product, and correlate well with consumer attributes e.g. "ease of combing", "manageability" or "detangling". Combing studies can be performed on both wet and dry tresses.

3-Point Bend —

This accessory measures flexural properties of hair tresses, and is most commonly used for styling claims such as "hold", "stiffness" or "feel" in the claims packages for styling polymers, hair gels and hair sprays.





Friction —

The friction accessory combines a rubber probe mimicking hand/skin compliance and texture properties, with a base plate mechanism to quickly secure and clamp the hair. Friction properties correlate well with consumer attributes such as "smoothness" or "surface damage" (heat, environmental, bleaching, repeated styling).

Curl compression —

The curl accessory measures the compression properties of circular hair curls formed from hair tresses as a technical test, predictive of consumer hair curl sensory feel. This method is perfect for "softness" or "curl retention" claims, for products such as gels, mousses, sprays and pomades.

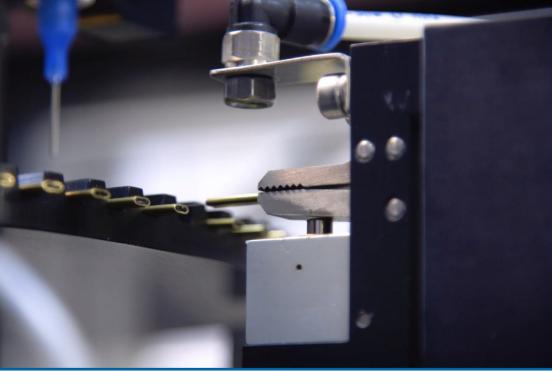


Stress and Tensile accessories —

The stress accessory offers dimensional and tensile testing of single fibres on the fibra.one system, including hair, textile or natural fibres. The accessory uses a laser scanning micrometer module, which records the fibre dimensions to enable the calculation of uniaxial normal stress data. Fibres can be extended to a specific extension or to failure to obtain tensile parameters such as the elastic modulus, break stress and break strain. For hair fibres, this module can be used to support "strengthening", "hydrating" and "damage repair" claims. The tensile accessory operates in the same way without the additional dimensional capability, however comparisons on the same fibre samples before and after treatment can be made using a non-destructive tensile method.







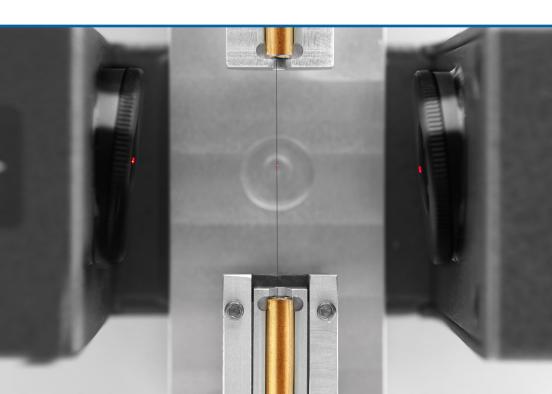
MTT690 — Miniature Tensile Tester

The MTT690 is an automated, consistent and efficient instrument designed to measure the tensile properties of hair. It offers a high throughput of 100 single specimens, in either a dry or wet state. The MTT690 measures the tensile properties of single hair fibres by stretching them to a specified percentage or to failure, and is primarily used to support "strength", "hydration" and "damage repair" claims.

The MTT690 package includes consumables as well as a crimping set for sample preparation.

FDAS770 — Fibre Dimensional Analysis System

The FDAS770 utilises a Laser Scanning Micrometer to allow accurate, non-contact dimensional measurement of fibres for the normalisation of mechanical (stress) data. It allows for cross-sectional area calculation, with fully automated fibre rotation and translation. The FDAS770 lends itself to irregular, opaque or semi-transparent fibres such as hair, cotton, glass, flax, bamboo or silk.





LEX820 — Linear Extensometer

The LEX820 is a high resolution extensometer, especially developed for brittle fibres that fail at low strain values. At its core, a DC micrometer-drive delivers exceptionally smooth travel, combined with a high positional repeatability required to capture accurate strain data. The LEX820 features a 20N or 2.5N load cell to measure force data with an excellent linearity and low compliance. A compliance correction can be applied to tensile data through our software. The LEX820 open frame design means that it can be used in conjunction with techniques such as X-Ray diffraction or neutron scattering.



Skin Instruments

BLS780 — Ballistometer

The BLS780 is based upon the traditional ballistometric principle of impacting an object at a constant force. This measures its firmness by indentation and dynamic resilience by the degree of rebound. The innovation in the BLS780 arises from the inclusion of a torsional wire mechanism, which makes the instrument non-gravity dependant. The unique design allows the user to define the amount of energy put into the skin so that different layers may be studied.

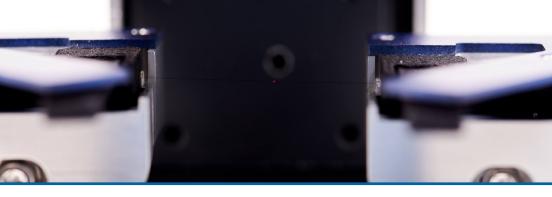
Applications for the BLS780 include supporting "elasticity", "firmness", "hydration", "antiageing" and cellulite product claims, as well as evaluating medical conditions (schleroderma and oedema), quality of wound formation and burn/scar healing.





TLS850 — Translucency Meter

The TLS850 uses a novel method developed by Dia-Stron for investigating translucent materials such as skin using a hand-held probe. A controlled beam of light from an RBG LED source, in contact with the surface, places light into the sample. Translucent materials sub-scatter the light within the medium, which the TLS probe detects as the light exits the surface, measuring the light intensity as a function of distance from the original light source. The TLS850 is ideal for measuring skin translucency and supporting "radiance" product claims.



Rental Scheme details

- fibra.one tress package includes two accessories in the package price (for example, combing and friction) with the option to add extra accessories for curl compression or 3-point bend testing priced individually
- fibra.one single hair fibre package includes the tensile or stress accessory, and sample mounting consumables
- The fibra.one and standalone single fibre instruments are available on rental agreement terms from a minimum of three months
- BLS780 and TLS850 packages include the parallel support arm, available from a minimum of one month rental
- Rental Scheme availability is dependant on geographical location, contact Dia-Stron for availability in your region

Contact the Dia-Stron team via **enquiry@diastron.com** for more information. All rental agreements must be signed by both the customer and Dia-Stron prior to the commencement of the rental period, and are subject to our Rental Scheme Terms and Conditions.

