

The **MicroTester G2** is a micro-scale tension-compression test system. It can be used to determine the stress-strain properties of a variety of materials including tissue samples, cell aggregates, hydrogels, and tissue engineering scaffold materials.

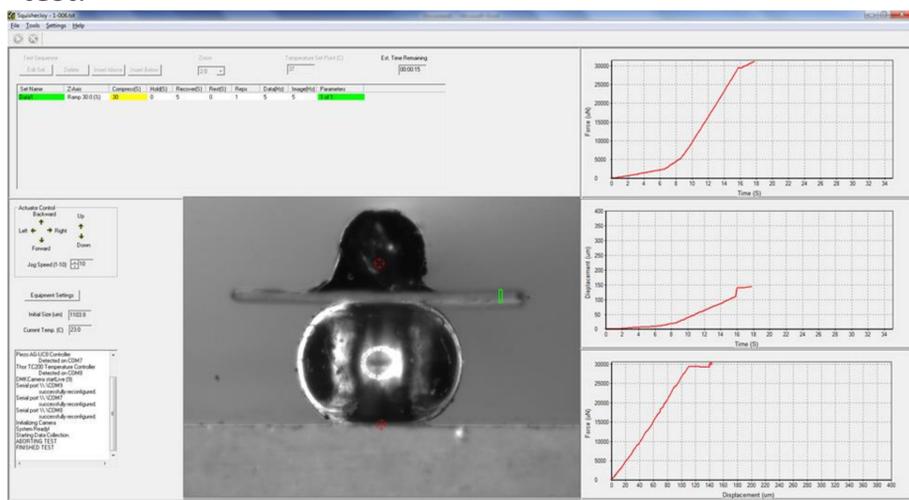
By **detecting** small changes in a force sensing micro-wire, the system can measure forces and displacements that are much smaller than a conventional mechanical test system. The system incorporates a temperature-controlled fluid bath for maintaining ideal specimen conditions and a high-quality optical system to provide user feedback.

Force Resolution down to 10nN and spatial resolution down to 0.1 μ m are possible with this specialized system. The control software can support both force-controlled and displacement-controlled user protocols.





Below, the **MicroTester G2** compresses a microsphere between 2 parallel plates as prescribed in the user test protocol. The system outputs force and displacement data as well as time-correlated images of the test.

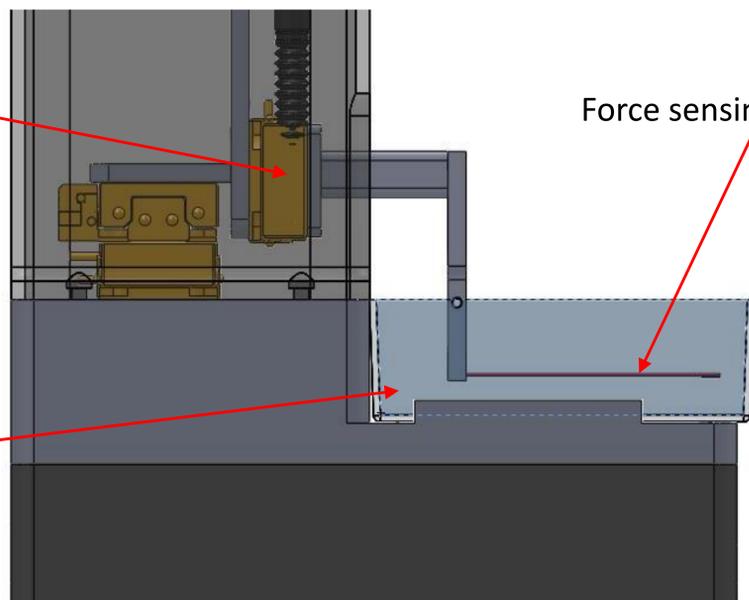


Configurable test software with live images and data

Dimensions	56 x 14 x 24 cm
Weight	9 kg
Force Capacity	500 mN
Available Force Transducers	0.005, 0.02, 0.08, 0.2, 1, 5, 25, 100, 500 mN
Force Accuracy	Approx. 0.2% of transducer capacity
Maximum Grip Separation	Approx. 10 mm
Maximum Velocity	5 mm/s
Maximum Cycle Frequency	0.1 Hz
Maximum Data Rate	5 Hz
Actuator Technology	Piezo-electric Motor
Actuator Resolution	0.1 um
Range of Field of View	0.4 – 11.0 mm
Vertical Image Resolution	2048 px
Secondary Camera Option	Yes
Test Modes	Compression, Tension, Bending, Indentation, Shear

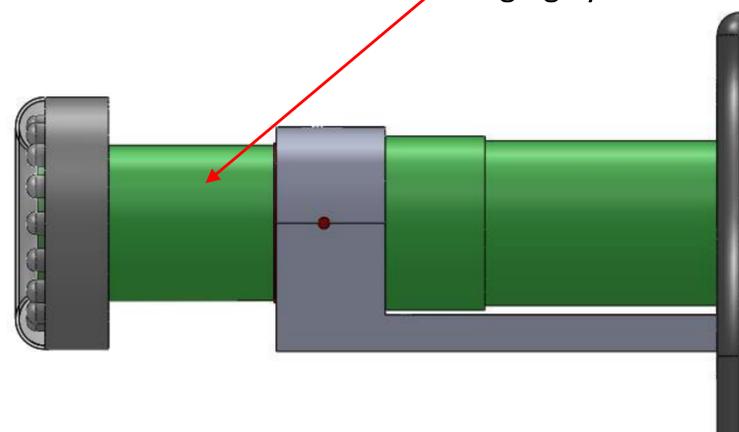
Three-axis, high resolution piezo-motor stage

Temperature-controlled fluid bath



Force sensing micro-wire

High-resolution imaging System



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Our **mechanical test systems** allow researchers to characterize the mechanical properties of biomaterials. Our **mechanobiology technologies** provide insights into the response of cells to mechanical stimulation.

CellScale's technologies are improving human health by helping researchers discover the causes of disease, improve medical treatments and devices, and advance regenerative medicine and other basic science research.

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