



The **MechanoCulture J1** is capable of running 6 cyclic mechanical stimulation tests on a variety of tissues, scaffolds, and constructs. Each test chamber is equipped with its own actuator and force sensor running an independent test protocol. During the test, users can visually observe the specimens through the transparent chambers and measure changes in specimen stiffness. After the test, specimens can be removed for further macro- and micro-scale analysis.

Key Features:

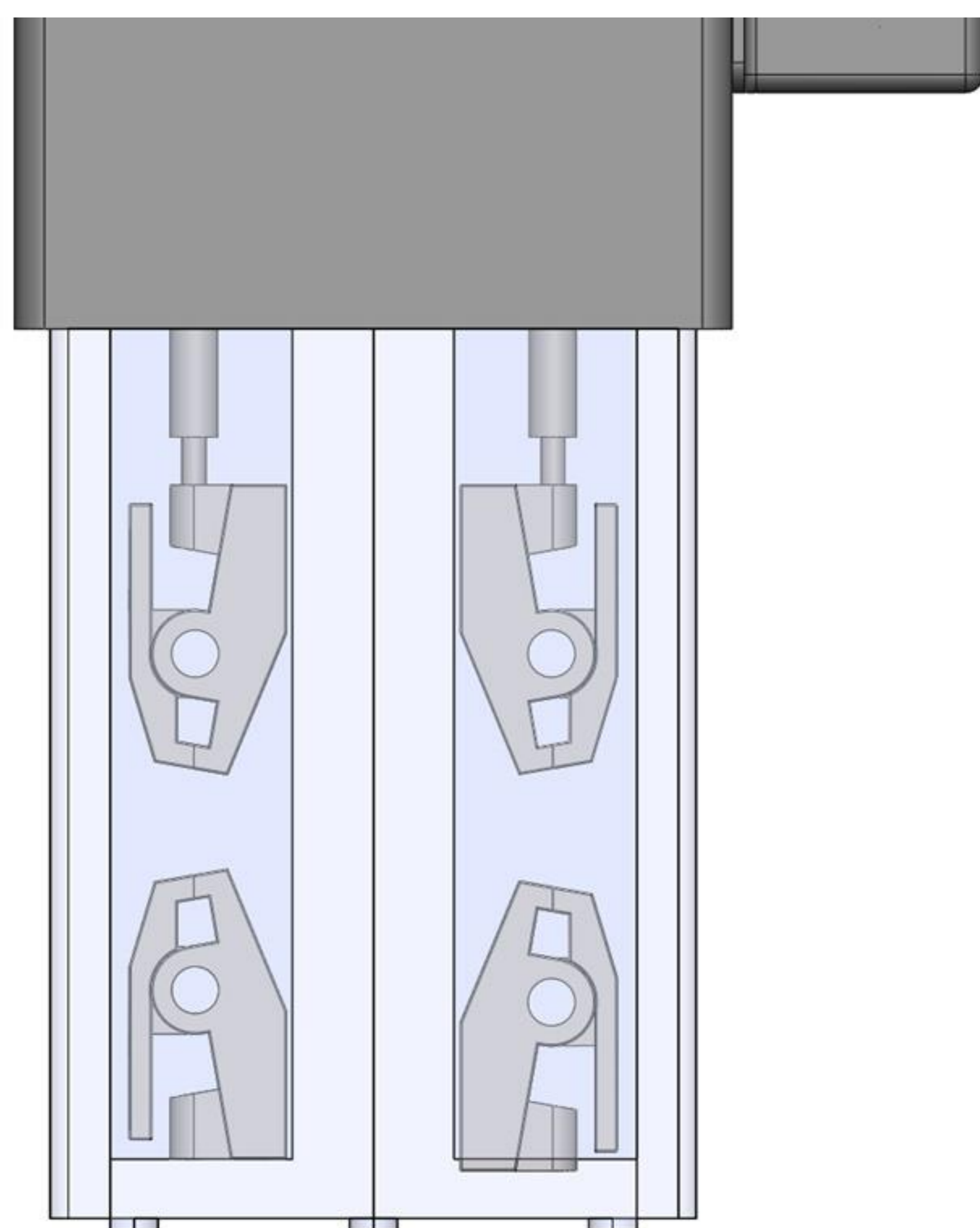
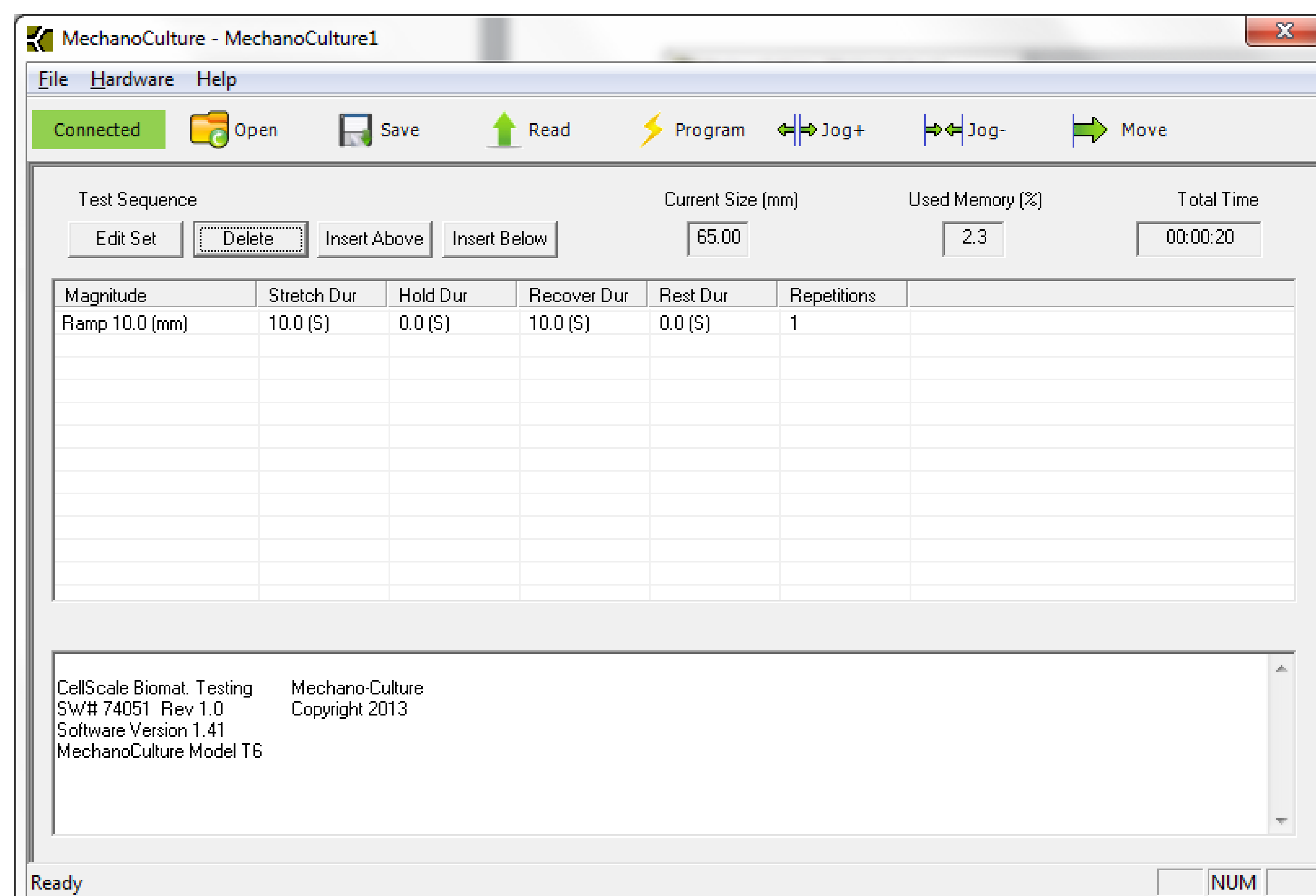
- 6 independently-programmed test protocols
- 6 force/displacement data outputs with onboard data storage
- Load cell options: 10N, 20N, 50N, 100N
- 25mm actuator travel with grip separation up to 200mm
- Spring-closure specimen grips with adjustable gripping force
- Ports for fluid exchange in each well
- Autoclavable chambers
- Fluid-cooled incubator-compatible design
- PC-independent operation
- Software for specifying simple, cyclic, and intermittent stimulation protocols





The **MechanoCulture J1** can be programmed to run constant velocity or sinusoidal stretch patterns. Magnitudes, frequencies, rest periods, and cycle counts can all be specified in the software application and programmed to the device.

Options are available for the size of chamber wells and specimen grips. These can accommodate narrow or wide specimens, stiff or highly fragile tissue samples. Get in touch with us to find out more.



Dimensions	16.5 x11.5 x 30 cm
Weight	7 kg
Stimulation Mode	Customizable tension
Number of Wells	6
Force Capacity	100 N
Available Load Cells	10, 20, 50 and 100 N
Force Accuracy	0.2% of load cell capacity
Max Stretch Displacement	25.4 mm
Max Grip Separation	200 mm
Max Velocity	4 mm/s
Max Cycle Frequency	2 Hz



CellScale Biomaterials Testing is the industry leader for precision biomaterial and mechanobiology test systems. Our products are being used at world-class academic and commercial organizations in over 30 countries around the globe.

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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