

Features and Benefits	ElastoSens™ Bio	Rheometers	Compression testers
Who benefits most from using these technologies?			
Research Labs	YES	YES	YES
R&D Labs	YES	YES	YES
QC Labs	YES	YES	YES
Production floor	YES	NO	NO
What features are important to get desired results?			
Measures accurate mechanical characteristics of materials	YES	YES	YES
Allows non-destructive and long-term viscoelasticity testing of samples	YES	CM*	NO
Allows to test the degradation on the same sample	YES	NO	NO
Allows to study short and long-term degradation of materials	YES	NO	CM*
Analyses up to 5 samples in parallel or independently (get fast results!)	YES	NO	NO
Allows temperature control	YES	YES	YES
Allows to expose sample(s) to photostimulation in real time	YES	YES	NO
Allows to expose sample(s) to active environment (enzymes, acid solutions, blood, etc.)	YES	NO	CM*
Allows to measure swelling (volume change) of materials	YES	CM*	NO
Has removable sample cups (move samples for overnight storage)	YES	NO	NO
Displays LIVE mechanical property changes of materials during gel formation/degradation	YES	YES	NO
Measures dynamic processes (gel formation, coagulation, swelling, etc.)	YES	YES	NO
Measures samples with no contact	YES	NO	NO
Fits in biological hood for cell-friendly mechanical testing environment	YES	NO	YES
Can be used in sterile testing environment	YES	NO	CM*
Other important features			
Direct and real time measurement of viscoelasticity	YES	YES	NO
Easy to use (a few hours training)	YES	NO	NO
Required level of users expertise in rheology & mechanics	NONE	HIGH	HIGH
Price Range	LOW	HIGH	MEDIUM

How does ElastoSens™ Bio line up against other technologies?

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Tested Materials & Applications			
Tests gels/hydrogels during gel formation	YES	YES	NO
Tests gels/hydrogels during gel degradation	YES	NO	NO
Tests 3D bioprinted scaffolds	YES	NO	CM*
Tests blood/hemostatic agents interaction	YES	NO	CM*
Tests coagulation of blood	YES	YES	NO
Tests Superabsorbent Polymers	YES	NO	CM*
Tests viscous liquids	NO	YES	NO

* Challenging Measurements

ElastoSens™ Bio fills the gap between rheometers and compression testers by characterizing viscoelastic soft solids in a completely new way, gathering crucial information on their viscoelasticity.

