

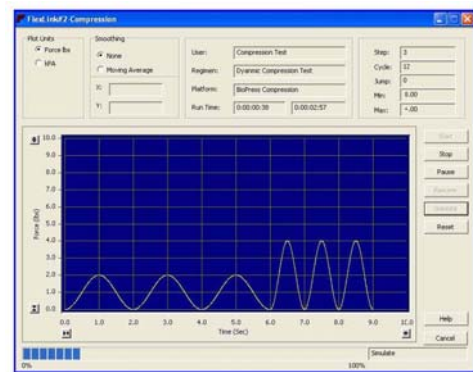


# FLEXCELL® FX-5000™ Compression System

(cat. no. FX-5000C)

## Apply compression to tissue samples or 3-D cell-seeded constructs.

- Computer-regulated bioreactor that applies cyclic or static compression to 3-D cell-seeded constructs *in vitro*.
- Uses positive air pressure to yield up to 14 lbs of applied force (minimum force resolution of 0.1 lbf).
- Simulate *in vivo* tissue strains and frequencies in cells from muscle, lung, heart, blood vessels, skin, tendon, ligament, cartilage, and bone.
- Contains state-of-the-art digital valve to automatically regulate and maintain pressure for a specified compression regimen.
- Piston and stationary platen compress samples in a BioPress culture plate or StagePresser microscope device.
- Multiple frequency, amplitude and waveform changes can be programmed in one regimen (Fig. 4).
- Drives up to four independent FlexLink remote compression and/or tension controllers.
- Better control of waveforms at low and high amplitudes.
- Capable of delivering frequencies between 0.01 and 5 Hz.



**Figure 4.** Waveform plot showing a sine wave with various frequency and amplitude changes.

### Waveforms available:

- Static
- Sinusoidal
- Heart Stimulation
- Triangular
- Square
- Custom

### FX-5000 Compression System includes:

- Host computer with 17" flat panel monitor
- FlexSoft FX-5000 software
- FX5K™ Compression FlexLink
- Compression accessory package:
  - BioPress Baseplate and four gaskets
  - Compression clamping system
  - Four BioPress culture plates
  - Tubing and quick disconnects