

FLEXCELL[®] FX-6000[™] Tension System

Stretch cells in monolayer or 3D culture



- Computer controlled bioreactor that applies **cyclic** or **static** tensile strains to cells cultured in monolayer or 3D allowing users to simulate *in vivo* tissue strains and frequencies.
- State-of-the-art digital valve automatically regulates and maintains regulated vacuum **and** positive air pressure for a specified regimen to deform a flexible-bottomed Flexcell[®] culture plate producing up to 33% substrate elongation (*see Table 1*).
- FlexSoft[®] software allows for multiple frequency, amplitude, and waveform changes to be programmed in one regimen.
- Cylindrical or Arctangle[®] loading posts used to apply equibiaxial or uniaxial strain, respectively.
- Gradient strain (unconstrained distention) achieved by removing the loading stations.
- Up to four FlexLink[®] controllers can be driven with one FX-6000[™] System.
- Available waveforms: static, sinusoidal, heart stimulation (*Fig. 3*), triangular, square, and custom.

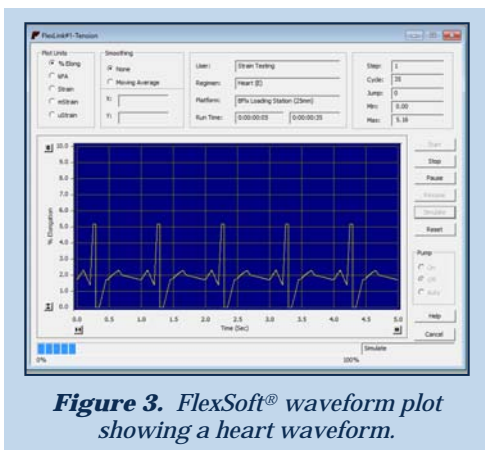


Figure 3. FlexSoft[®] waveform plot showing a heart waveform.

Table 1. Maximum achievable strains in Flexcell[®] culture plates with FX-6000[™] Tension System.

Culture Plate	Max Strain
BioFlex [®] (with 25 mm Loading Stations)	21.8%
BioFlex [®] (without Loading Stations)	33%
Tissue Train [®]	20.8%
UniFlex [®]	12.2%
HT BioFlex [®]	8.0%

FX-6000[™] Tension System includes:

Equibiaxial Configuration

- Laptop with 15" monitor
- FlexSoft[®] FX-6000[™] software
- FX-6000[™] Tension FlexLink[®]
- BioFlex[®] Baseplate Kit
- Tubing and Adaptor Kit

Uniaxial Configuration*

- Laptop with 15" monitor
- FlexSoft[®] FX-6000[™] software
- FX-6000[™] Tension FlexLink[®]
- BioFlex[®] Baseplate Kit
- Tubing and Adaptor Kit
- TT4000 – Set of Arctangle[®] Loading Stations

*All components listed not included in price below

ORDERING INFORMATION (Please contact distributor for pricing)

Catalog Number	Product/Item	Price
FX-6000T	Flexcell [®] FX-6000 [™] Tension System	
FX-6000TFL	Additional FX-6000 [™] Tension FlexLink [®]	

TENSION EQUIPMENT