

Mechanical stimulation for cell culture



A simple mechanical stimulation cell culture system at last!

TC-3 is a simple and multipurpose cell culture bioreactor designed to provide mechanical stimulation to a variety of samples and tissues. It enables you to work with horizontally and vertically arranged multiple samples, with immersed and air-liquid interface setups, offering three different sets of grips and imparting userdefined tension and compression axial loading.

> **Forget** about expensive mechanical testing systems that are poorly adapted for cell culture and save money and inconveniences with the TC-3 Bioreactor: the new generic system to mimic the in vivo mechanical environment in cell

culture labs.



VERSATILE CHAMBERS ADAPTABLE TO A VARIETY OF TISSUES

- Three models of grips enble you to secure disc-shaped, sheet-like and rod-like specimens
- Applications: blood vessels, cardiac muscle, bone, cartilage, ligaments, tendons and skin

MULTI-CHAMBER SYSTEM

- Up to 3 chambers can be utilized simultaneously
- Either shared or independent nutrient environment

HORIZONTAL AND VERTICAL CONFIGURATIONS

- Horizontal setup suitable to build air-liquid interfaces and work with sheet-like samples
- Vertical setup for immersed testing

OPTIMISED SAMPLE VISUALISATION

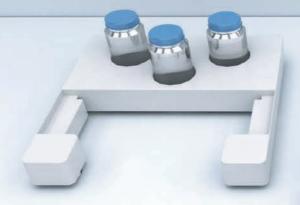
 Optical grade windows at the bottom of the chamber, allow the inspection of samples by microscopy techniques without opening the vessel

■INTELLIGENT DESIGN FOR CELL CULTURE

- Lightweight, corrosion resistant and compatible with standard incubators
- Compact autoclavable chambers with small volume
- Perfusion and instrumentation ports available upon request

■ MECHANICAL STIMULATION CAPABILITIES

- Dynamic (pulsatile) tension/ compression loading
- Load shared among specimens, same displacement for all 3 specimens



The TC-3 Bioreactor has specially designed compartments in which culture media reservoirs can be stored to facilitate transportation when the system is fully assembled.



don whitley scientific

www.dwscientific.co.uk