

Streamer[®] Shear Stress Device (STR-4000)

Apply fluid shear stress to cells with laminar, pulsatile, or oscillating flow

- Parallel-plate flow system used to apply fluid-induced shear stress to cells grown in a monolayer.
- Includes a six-chamber laminar flow device and can be used to apply laminar, pulsatile*, or oscillating* flow to cells cultured on special matrix coated PTFE rimmed 25 x 75 x 1 mm Culture Slips[®].
- Regulation of shear stress from 0 - 35 dynes/cm² by computer-controlled peristaltic pump.
- Analyze effects of fluid flow on cell alignment, mRNA and protein expression, and signaling pathways.
- Remove quick disconnect fittings for easy cleaning after use.
- Streamer[®] device is autoclavable.
- Run up to six slides at one time.
- Comes with two pulse dampeners.

- Streamer[®] System includes:
 - Streamer[®] device
 - Notebook computer
 - Tubing and quick disconnects
 - Peristaltic pump
 - StreamSoft[™] software
 - Two pulse dampeners
 - 12 Culture Slips[®]

*In order to apply pulsatile or oscillating flow the Osci-Flow[®] is required. Osci-Flow[®] needs to be ordered separately in addition to the Streamer[®] System.

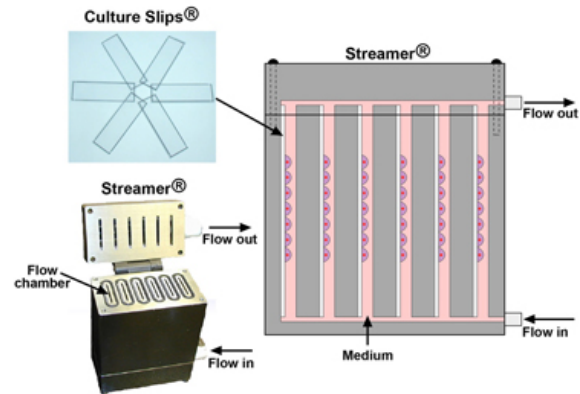


Figure 24. Streamer[®] Shear Stress Device

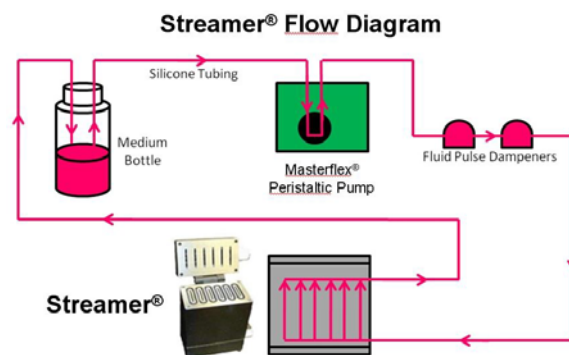


Figure 25. Streamer[®] system set-up without Osci-Flow[®] Controller

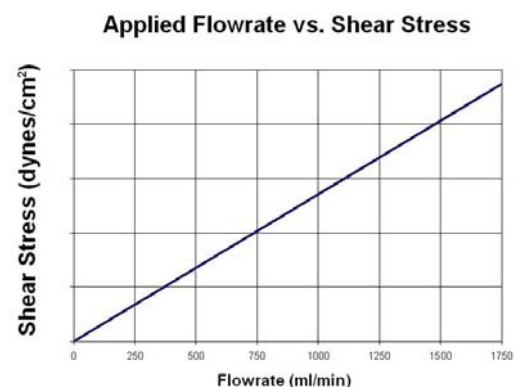


Figure 26. Representative graph of applied fluid shear stresses for a given pump flow rate for cells cultured on Culture Slips[®] and placed within the Streamer[®] device