

Static tubular chamber

Description

The static tubular chamber has been designed to hold cylinder-shaped scaffolds of variable bores and lengths and to subject them to flow conditions. It allows creating an internal flow circuit to pump flow through the lumen of the vessel, as well as an external circuit to impulse culture media around its outer surface. The chamber is composed of two main parts which can be manipulated separately in order to facilitate the positioning of the scaffold.



Moreover, the useful length of the chamber can be adapted to fit the length of the scaffold.

Main features

- **Forming parts:** The chamber is composed two parts forming internal and external flow circuits, respectively. The gap in the internal circuit is filled with vessel scaffold, allowing pumping fluid media inside the scaffold lumen. The external circuit aims to circulate culture media over the external surface of the scaffold so nutrients are delivered to the outer surface.
- **Adaptable working length:** In order to fit different scaffolds sizes, the working length in between the tube edges of the inner circuit may be adjusted, always guaranteeing no fluid leakage. Since the scaffold diameter may be also varying depending of the kind of vessel, we can modify the dimensions of the tubing in order to customize the chamber for your particular application.
- **Working configuration:** Once the chamber is locked, the system is ready to be connected to the culture circuit. The number of tube docks may be variable depending on the particular needs of the experiment. Although the standard configuration it has four input/output ports, the chamber may be modified in order to adapt the number of ports to the demands of your experimental set-up.

Applications

To apply luminal and external flow to any kind of tube-shaped scaffold.

Static tubular chamber	
Autoclavable	Yes
Flow circuits	<ul style="list-style-type: none"> • Luminal flow circuit • External flow circuit
Scaffold type	Tubular scaffold
Scaffold Internal diameter[*]	7 to 10 mm
Scaffold length[*]	20 to 80 mm

[*]: Chambers for special scaffold dimensions available upon request