



Oscillatory Flow Reactors

Oscillatory flow is a method of mixing materials using the combination of sharp edges (baffles) and a periodically reversing flow in a tube or channel that has potential applications in several fields. Vortices generated on the downstream side of each baffle following each flow reversal interact with each other in a complex manner known as oscillatory flow mixing.

Mixing within the system is controlled by the oscillatory flow, which, in turn, is controlled by varying the frequency and amplitude of the oscillation. Mixing is therefore decoupled from the mean flow.

Oscillatory Flow Mixing provides highly effective mixing in tube reactors by the combination of fluid oscillations and baffle inserts. Mixing behaviour is controlled dynamically by oscillation intensity or geometrically by baffle design

We offer a range of tube geometries and system configurations.