

SEQUENCING BATCH REACTOR



Categorization of Technology

BIOLOGICAL → **AEROBIC** → **SUSPENDED GROWTH**
Mechanized Treatment System

Technology Brief

Sequencing Batch Reactor (SBR) is the fill-and-draw type activated sludge process. SBR is considered to be an ASP functioning in time instead of space. It is the process in which, wastewater is filled in a batch reactor, aerated to remove pollutants, allowed to settle and then discharged. Each tank is filled for a discrete period of time after which it operates as a batch reactor. There is a series of walls of baffles at the inlet of the tank which facilitates the mixing of the incoming influent and the returned activated sludge. SBR is one of the most sought technology options due to its low footprint since all operations of equalization, aeration and clarification occur in the same tank. However, a higher level of sophistication is required, increasing the operation and maintenance cost. Also, this is among the most energy-intensive treatment technologies.