

# MOVING BED BIOREACTOR



## Categorization of Technology

**BIOLOGICAL** → **AEROBIC** → **SUSPENDED + ATTACHED**  
Mechanized Treatment System

## Technology Brief

Moving bed bioreactor (MBBR) or Moving media bioreactor (MMBR) is a biological technology used for wastewater treatment. It is a combination of activated sludge (suspended growth) and a biofilter (attached growth). This technology comprises special plastic media or carriers immersed in the aeration tank, which provide good contact between the wastewater in the tank and biomass that gets attached to the carriers. The large internal surface area provided by carriers optimizes the contact of air, water and bacteria, and also saves space due to compactness. The expansion of MBBR STP can be achieved by increasing the number of carriers, and it is not affected by toxic loads. This eliminates the recirculation of sludge as practiced in ASP and also does not require backwashing. The volume of carriers per unit wastewater is an important consideration in the O&M of MBBR.