

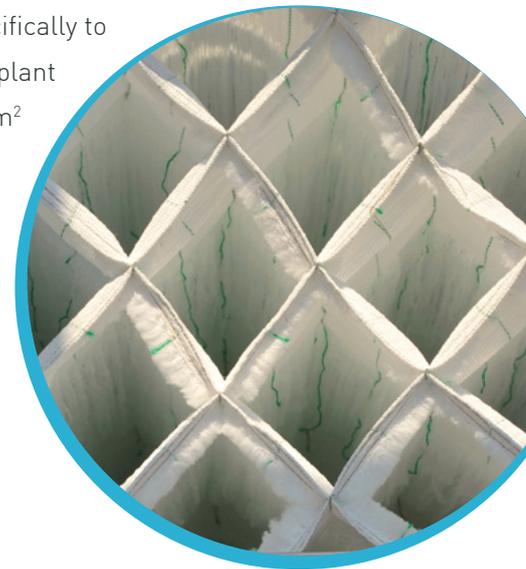
Features and Benefits

The Organica Biomodule is the heart of the Organica FCR solution, specially designed to maximize the surface area where this unique fixed-bed biofilm can grow. In Organica FCR systems we find 14-18 kg of active biomass is for each cubic meter of reactor space, compared to 5-8 kg/m³ in other activated sludge-based systems.



The **natural root structures** provide 12,000 m² of surface area for each cubic meter of reactor space they occupy. Oxygen and enzyme transfer between the biofilm and roots occurs naturally, making this living biofilm carrier the ideal habitat for the microorganisms in the system.

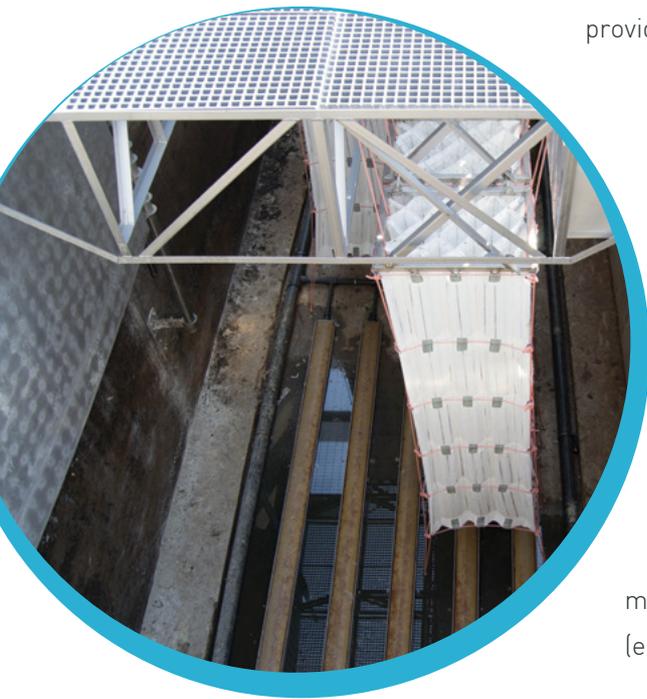
The **engineered root structures**, Organica's patented biofiber media, were developed specifically to mimic the physical qualities of natural plant roots. The patented design ensures 50.6 m² of surface area per unit of biofiber media, providing a vast habitat for the fixed bed biofilm to grow on.



The arrangement of plants and biofiber media units is designed to ensure flawless operation.

The plants are carefully placed to avoid root tangling with the biofiber media below, allowing routine inspection of the reactors.

The configuration of the Biomodules also allows for simple maintenance when equipment in the reactors (e.g. diffuser head) requires replacement.



FEATURES	BENEFITS
Modular design in one single structure including stainless steel carrier frame and mounting mechanism	Easy installation and durability with ability to bear significant biofilm loads over a long period of time
Patented Biofiber media	Increased surface area to support robust and diverse biomass development
Plants and plant racks	Support for natural plant root surface area that allows the growth of a diverse and plentiful biomass and adds to the unique look & feel of the Organica FCR solution
Fastening ropes	Easy installation and routine maintenance