





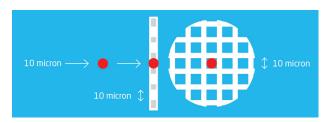
for Suspended Solids Removal

Panta Rei's **disc filtration with Ultrascreen Technology** is a high-performance system for tertiary filtration of wastewater, which exploits the principle of "**dynamic tangential filtration**".

The influent feeding the filtering discs enters parallel into the filter media, differently from what happens in other kind of filters, characterized by an orthogonal filtering system. In the dynamic tangential filtration, where the mesh is continuously rotating, the same particle cannot pass through the mesh at an oblique angle and is retained on the screen.

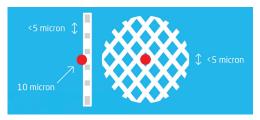


As it will be seen in the following images, the dynamic tangential filtration shows a clear advantage over traditional filtration systems, since there is a **better performance** in terms of solid particles rejection.



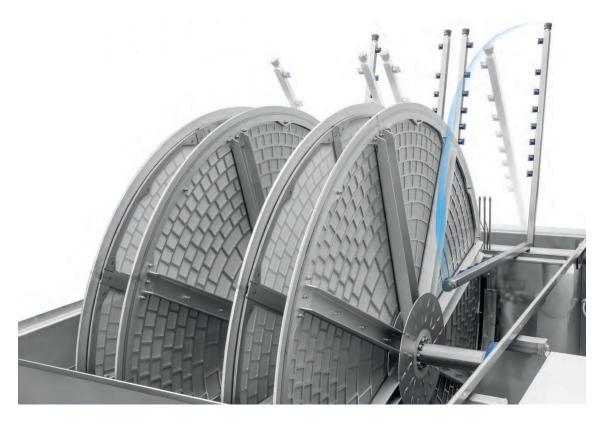
Traditional filtration

The 10 microns diameter solid particle, is able to pass through the mesh, whose diameter is the same as the particle's.



Dynamic Tangential Filtration®

The inclination to the water flow crossing surface keeps the 10 microns diameter particle from crossing the mesh.



Another advantage of the disc filters over sand/multigrade pressure filters is that they are compact units, therefore require **less space** and can work continuously, 24/7, since they feature **automatic backwashing** also during the working phase.

Smart reduction of suspended solids.

