Ultrafiltration system removes all bacteria, pathogens, organic matters and suspended solids from the pool water in one single pass, thanks to the small and absolute barrier. Only very small dose free chlorine (concentration of 0.2-0.3 ppm) is required to keep disinfectant action – while combined chlorine, trihalomethanes and all harmful disinfection by-products are drastically reduced. Water flows at low pressure in a circulation loop to the Ultrafiltration membranes while the purification process takes place – without use of chemicals. Disinfectants and other salts permeates the membranes and are recycled to the pool. All pollutants are expelled from the system by a simple and regular backwash.

**Potential use in hotel industry**
- Pool filtration systems
- Spa water filtration
- Downstream separation of biologically treated Grey water

**Advantages** | **Disadvantages**
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Very high water cleanness and quality (< 0.1 NTU) | May be more expensive than regular filtration systems
Drastic reduction of chemical consumption | 
Cut recycling water capacities and energy costs by up to 50% |
Case Study- Euro Disney (2019)

Background
• Two water purification systems by NUFLTRATION for Public Swimming Pool & Jacuzzi were installed at Disneyland Paris last July:
  (1) NUFilter System for Public Pool – 400 m³ pool Volume – 180 m³/hr nominal treated water capacity
  (2) NUFilter System for Jacuzzi Pool – 16 m³ pool Volume – 18 m³/hr nominal treated water capacity

Part 3 –Companies manufacturing/implementing the technology

Nuf Filtration - https://www.nufiltration.com/effluent