

The Basics – Filtration Spectrum

The chart below compares the sizes of typical water contaminants and various filtration technologies to address each. This chart emphasizes the importance of proper pretreatment before feed water passes through a Reverse Osmosis unit or Ion Exchange bed to avoid premature exhaustion by larger suspended solids.

| 0.0001 Micron | 0.001 Micron | 0.01 Micron | 0.1 Micron | 1 Micron | 10 Microns | 50 Microns | 100 Microns |
|------------------|----------------|------------------|-----------------|-------------------|-----------------------|------------|-------------|
| Atoms | Molecules | Viruses | Bacteria | | Pollen | Human Hair | Sand |
| Dissolved Solids | | Suspended Solids | | | | | |
| Colloids | | | | Solids can Settle | | | |
| | | | | | Multimedia Filtration | | |
| | | | Microfiltration | | | | |
| | | Ultrafiltration | | | | | |
| | Nanofiltration | | | | | | |
| Reverse Osmosis | | | | | | | |
| Ion Exchange | | | | | | | |

