

Depth Cartridge Filters

Raw water typically contains fine sediments and contaminants that do not settle down. Such particles vary in size from silt and sand to very fine dust and bacteria. The simplest type of cartridge filters is a sediment filter that acts as a fine mesh to screen out microscopic particles. Micron rating is a measure of the filtration capacity of a cartridge filter. One micron is equivalent to one millionth of a meter. To put this figure in perspective, human hair is typically 75 microns in size!

Depth cartridge filters are specially designed to offer better sediment prefiltration distribution across the cartridge surface. Instead of the entire cartridge having the same micron rating (for example, 5 micron nominal), the outer layer of the depth cartridge filter traps coarser particles and the finer sediments towards the inner layers. The result is enhanced water flow and dirt-holding capacity and reduced replacement frequency.

Depth cartridge filters are constructed of cotton, cellulose or synthetic yarns, although polypropylene polymers are quite common. Some polypropylene filters are safe for food contact and do not pose toxicity. As with all other sediment filters, depth cartridge filters do not remove taste, odour or chlorine from water, nor does it affect the minerals or other chemicals. Therefore, combining sediment filtration with other technologies like activated carbon or reverse osmosis is common.



Melt blown depth cartridge filter