

APPLICATION SHEET

Water treatment

Raw water is natural water found in our environment, like rainwater, ground water, and water from lakes, rivers and sea. Almost all raw water requires treatment before the water can be further treated in most pure water treatment systems. The type and extent of a pretreatment system will depend on the type of source (i.e. well water, open sea, surface water). The major difference is not only the feed water composition, but also water quality variability by seasonal factors, climate conditions and/or activates on the surface waters. The pretreatment system can include various types of pretreatment equipment to remove suspended solids, dissolved solid and other contamination harmful to the pure water treatment system.

The primary objective of pretreatment of raw water is to make the feed water compatible with the pure water treatment systems. Membrane systems of differing types (microfiltration, ultrafiltration, nanofiltration, reverse osmosis (RO)) require pretreatment to increase the efficiency and life expectancy of the membrane elements by minimizing fouling scaling and degradation of the membrane.

The pretreatment systems can be chemical, mechanical or a combination. The Bernoulli Filter is an excellent mechanical filter to reduce the load of suspended solids in raw water down to 100 micron.

