

# APPLICATION SHEET

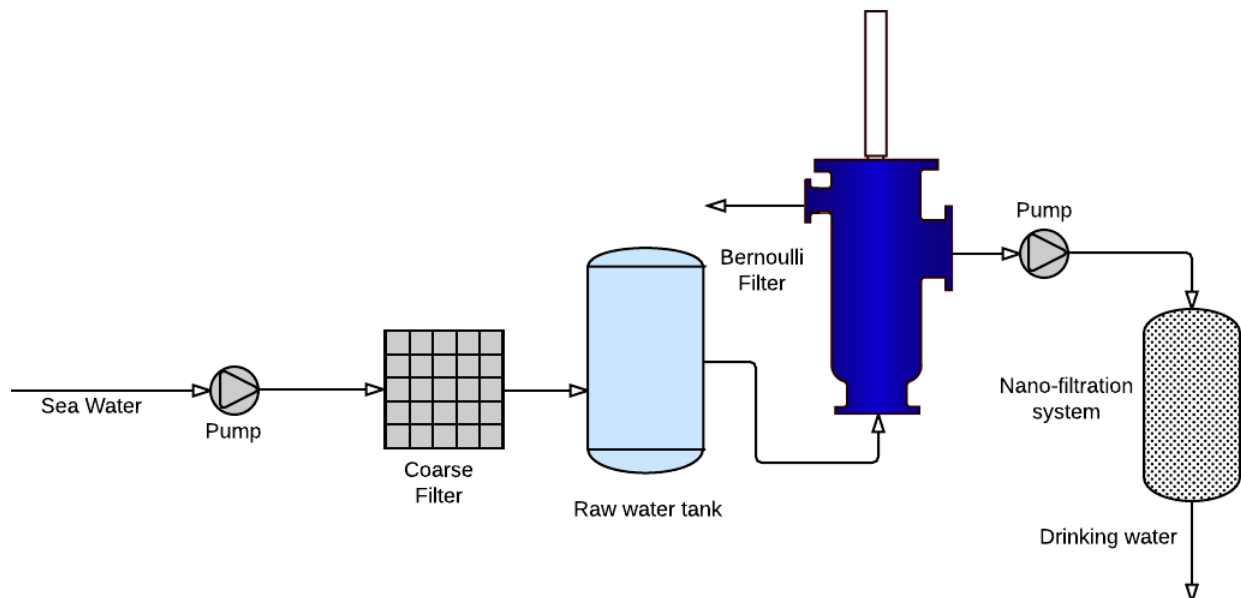
## Drinking water treatment

Water is at the center of economic and social development; it is vital to maintain health, grow food, manage the environment, and create jobs. Despite water's importance, millions of people worldwide are still without access to improved water sources, and even more are without access to consistently safe drinking water.

Drinking water can be produced from any natural sources like groundwater, lakes and rivers (surface water) or seawater. Drinking water must be free of suspended solids, microorganisms and toxic chemical. Mineral concentration recommendation vary from country to country but most of the minerals have a maximum concentration recommended to ensure safe, equilibrated and pleasant water to drink.

Depending on the water supply source different techniques of water treatment is required in order to meet the guidelines of drinking water quality set by World Health Organization (WHO). For surface water there are two commonly used techniques for treatment; conventional treatment which includes clarification, sand filtration, activated carbon adsorption and disinfection or ultrafiltration.

In a drinking water treatment system based on ultrafiltration technology the Bernoulli filter plays a vital role as part of the pre-treatment system. Pre-treatment is essential in order to increase the efficiency and life expectancy of the membrane elements by minimizing fouling scaling and degradation of the membrane.



**BERNOULLI**  
SYSTEM