



What is Reverse Osmosis?

Reverse osmosis (or R/O) is a water purification technology that removes dissolved solids from drinking water. Dissolved solids are small organic and inorganic particles that are suspended in water. Dissolved solids vary by location but include chemicals such as salts, calcium, and phosphates. Water with high total dissolved solids (TDS) levels often appear cloudy and can have “off” odors.

During the Reverse Osmosis process, water is pushed through a semi-permeable membrane to filter out very small particles. Typically, R/O involves four stages of filtration: a sediment filter, pre-carbon block, reverse osmosis membrane, and post-carbon filter. The sediment filter removes the largest particles, like dirt or sand, to prevent clogging of the subsequent filters. The pre-carbon block filters dissolved compounds, such as chlorine. The R/O membrane then removes any molecules heavier than water, such as salts, bacteria, and fluoride. Finally, the post-carbon filter removes micro-granular particles and odors.

Who Needs Reverse Osmosis?

In the US, water with TDS of 400 ppm (parts per million) often has a detectable “off” odor or taste. Quench recommends reverse osmosis filtration for customers who rely on well water or have tap water with TDS levels of 400 ppm or higher. Reverse osmosis is also commonly used in industries that require a high level of water purity, such as medical and dental practices, hospitals, laboratories, and certain manufacturing operations.

Which Quench Machines are Equipped with Reverse Osmosis?

All Quench filtered water coolers can be equipped with reverse osmosis filtration. R/O technology is standard on the Quench 800 and Quench 940, and optional on other coolers. Note that in the case of pressure-fed water coolers (as opposed to gravity-fed units), reverse osmosis filtration requires an additional pump. Also, all R/O-equipped machines require a drain line.

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