AQUAEKO WATER FILTRATION SYSTEMS

Why AQUAEKO Ultra Filtration…?

Advantages of UF:

- System operates at a low pressure.
- Removes bacteria and viruses.
- Keeps essential minerals in water.
- Installs quickly and easily.
- Does not generate waste water.

- RO technology is not applicable to all water types. “RO cannot be universally applicable for all water types due to key technology limitations.
- RO separates out dissolved chemical contaminants and cannot discriminate between so-called ‘good’ and ‘bad’ chemicals.
- RO purifier will remove all minerals from the water irrespective of whether these are good (such as iron, calcium, potassium) or bad (fluoride, arsenic, chromium) for your health.

Articles on TDS & pH :

1. https://www.safewater.org/fact-sheets-1/2017/1/23/tds-and-ph
2. https://www.thenewsminute.com/article/no-tap-water-not-safer-ro-water-fact-check-105542
3. https://www.thehindu.com/news/national/environment-ministry-moves-towards-regulating-ro-based-water-filtration-systems/article30782490.ece

Water with TDS less than 300 mg/litre was deemed excellent by WHO’s panel of water tasters in a report prepared as reference material to set new water guidelines in 2003.

Water with TDS between 300 and 600 mg/litre was good; water with TDS between 600 and 900 mg/litre was fair and water with TDS between 900 and 1200 mg/litre was poor. Water with TDS over 1200 mg/litre was unacceptable. On the other end of the spectrum, “water with low concentrations of TDS may also be unacceptable because of it’s flat, insipid taste”.

Ultrafiltration (UF) uses standard home water pressure to push water through a semipermeable membrane and remove any contaminants and retains minerals in the water, while filtering out bacteria, viruses, and parasites.

An ultrafiltration water system forces water through a .02 micron membrane. Suspended particles that are too large to pass through the membrane stick to the outer membrane surface. Only fresh water and dissolved minerals pass through.

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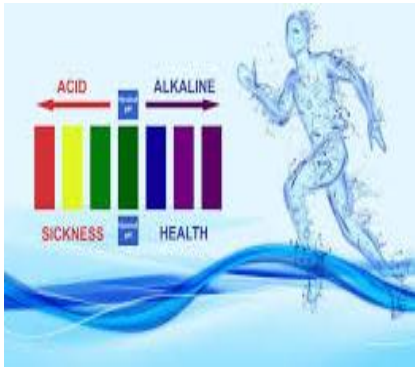
WHAT ARE TDS?

- TDS stands for total dissolved solids, and represents the total concentration of dissolved substances in water.
- TDS is made up of inorganic salts, as well as a small amount of organic matter.
- Common inorganic salts that can be found in water include calcium, magnesium, potassium and sodium, which are all cations, and carbonates, nitrates, bicarbonates, chlorides and sulfates, which are all anions.
- Cations are positively charged ions and anions are negatively charged ions.

Why Reverse Osmosis Water is Acidic ?



Reverse osmosis water is nearly pure water with a PH of 7. Reverse osmosis is a filtration method that removes more than 99% of all the contaminants in water.

The result is nearly pure water, which has neutral pH of 7. But if it's exposed to air, RO water drops down to an acidic pH range of 5 – 5.5. Why? Pure water is very hungry. it actually grabs CO2 right out of the air! Within about an hour, a glass of pure RO water can drop from a pH of 7 down to a pH of 5.5 or lower and become acidic water.

Alkaline water has a pH of greater than 7, so reverse osmosis water is not alkaline water. To alkalize it, you have to add calcium and other minerals to it.

Why Ultra Filtration Water is Neutral ?

Ultra filtration will not reduce the TDS of the water , thus there is very less chances that pH is altered in the process of purification.

pH of the water will be neutral before the filtration process and remains same without any effect, preserving the natural minerals prsent in the water and effectively removing the contaminrnts like Bacteria, Virus.

Which Purification Technology is Best ?

UF	RO + AA	RO
TDS < 200ppm	TDS < 500ppm	TDS > 500ppm