



## Dental RO: Questions & Answers

### Q. Why do we need a Dental RO at the practice?

A. Autoclaves/Decontamination rooms require a supply of pure water suitable for the autoclave equipment to standard EN13060. Deionized water can provide this on site. The RO Water may be used for the dental chair.

### Q. What are the advantages of having a Dental RO?

- A. There are many advantages, listed here are some of them;
- The practice will have a ready and abundant supply of water suitable for the autoclaves/other sterilisation equipment.
  - The need to re order bottles/containers of DI water will cease, and the risk of running out.
  - Dental RO takes up much less space than storing plastic bottles
  - Going green - no more disposal/transport of bottles of the water to the practice
  - Cost saving - Dental RO purified water costs much less than traditional DI water

### Q. How pure is the Dental RO water?

A. Extremely, it is suitable for use in Autoclaves/other sterilisation equipment It removes the Alkaline earth minerals which cause the “fur” up of the internal Surfaces. Chlorides/phosphates & sulphates which cause corrosion are also removed. Listed in the table are the average % at which the compounds are removed from the water by the pre and Reverse osmosis part of the filtration.

Aluminium	97-98%	Nickel	97-99%
Ammonium	85-95%	Nitrate	93-96%
Arsenic	94-96%	Phosphate	99+%
Bacteria	99+%	Polyphosphate	98-99%
Bicarbonate	95-96%	Potassium	92%
Bromide	93-96%	Pyrogen	99+%
Cadmium	96-98%	Radioactivity	95-98%
Calcium	99. 9%	Radium	97%
Chlorine	94-95%	Silicone	97%

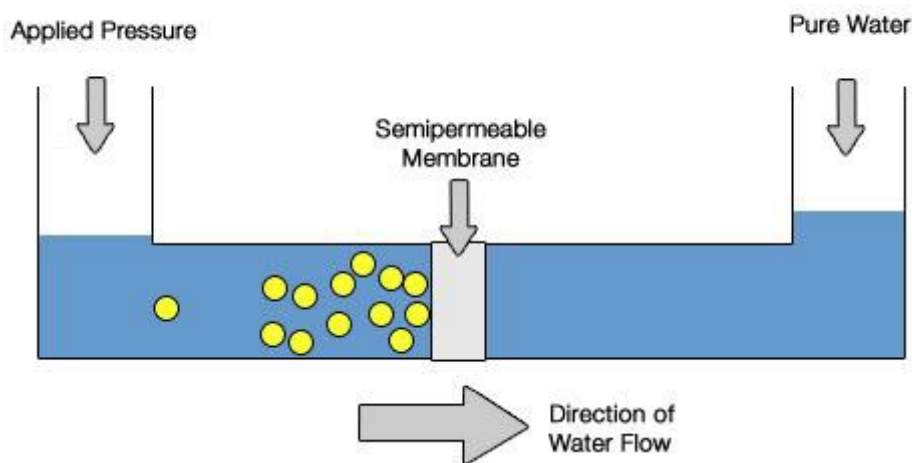
Chloride	90-98%	Silica	85-90%
Chromate	96-98%	Silicate	95-97%
Chromium	97-99%	Silver	95-97%
Copper	90-95%	Sodium	92-98%
Cyanide	98-99%	Sulphate	99+%
Ferro cyanide	94-96%	Sulphite	96-98%
Fluoride	98-99%	Zinc	98-99%
Iron	96-98%	Virus	99+%
Lead	96-98%	Insecticides	97%
Magnesium	96-98%	Detergents	97%
Manganese	96-98%	Herbicides	97%
Mercury	96-98%	Pesticides	98%

**Q. How does the Dental R. O. work?**

**A. By forcing the water through incredibly small holes in filters and membrane**

This allows the water molecules to pass through, but not the dissolved solids & contaminants which cause Autoclaves/sterilising equipment to “fur up”

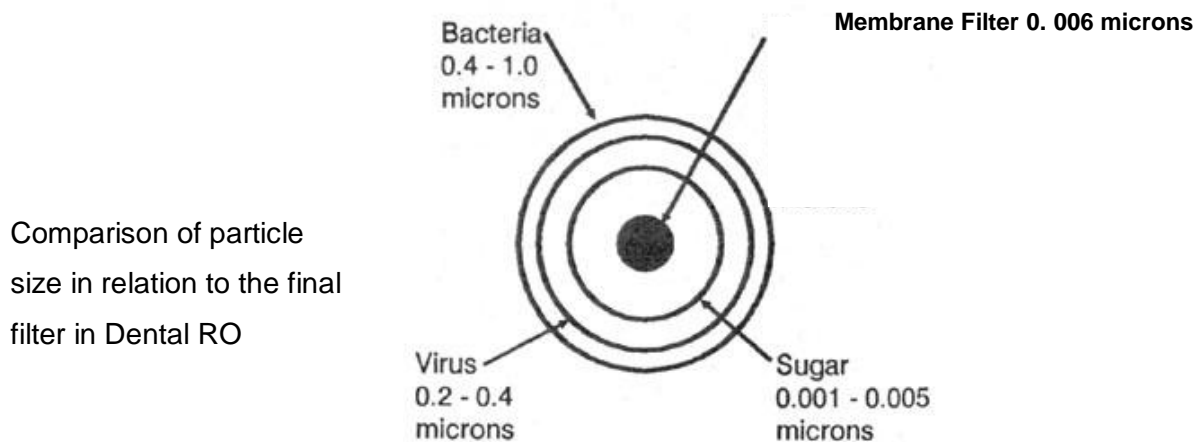
It is extremely close to De Ionised water, and is suitable for use in Autoclave equipment the diagram below gives an overview how the process works;



The water is forced through several filters till it reaches the final stage

Here the pores in the filter are only 0.0006 micron.

The yellow balls represent dissolved solids/contaminants, these cannot pass the last filter.



The water then goes through a another set of filters to reduce the TDS to zero, same as Deionized water

**Q. How can we check that the water is of a consistent standard?**

A. We supply a portable Micro Siemens/TDS testing meter, so the water can be tested daily if required.

**Q. Is the water to the same standard as De ionized?**

A. Yes, it meets standard EN13060 for electro conductivity.

**Q. Which makes of autoclaves can Dental RO be used for?**

A. MOCOM, Eschmann Little Sister/New Little Sister range/ SES2010/ SES 2000 , DAC, W&H, Burtons, Statim, Melag & others.

**Q. Can the system be connected to Washer Disinfectors?**

A. Yes, for the pumped DDL 3 version.

Contact us to check compatibility. This allows the system to have multi-functional usage, tap dispensing for rinsing/top up autoclaves and WD final rinse. Check with WD manufacturer that air gaps are fitted.

**Q. What maintenance is required?**

A. Filter changes recommended every 12 months unless you are high usage, or poor incoming water quality - we send you a reminder when the filters are due.

**Q. Do you install the Dental RO?**

A. Yes, we have a nationwide network of engineers who can install to a professional standard

**Q. What is the guarantee?**

A. We offer a 12-month warranty.

**Q. How is the water dispensed?**

A. We supply a separate tap which is dedicated for the pure water; other taps can be added if required.

**Q. Where does the unit go?**

A. Generally under the work surface, near to a sink is the best location.

**Q. Do we solve hard water issues?**

A. DDL provide the DDL TAC system to soften the water prior to the water entering the RO system. DDL TAC uses ground breaking technology. Low cost solution.

**Q. Do we support the practice in compliance and testing?**

A. Yes, we do provide free log books and training on their completion.

