

Nimbus Water Technologies – Water Treatment with Filtration Options – POU-point of use or POE – point of entry?



ABOVE - Typical range of domestic water treatment & filtration systems available.

- **A option of POU** – point of use water treatment, under counter systems, generally installed under counter in the kitchen area. Popular as a POU, is the 5 or 6 stage reverse osmosis water purification system, RO200 or RO50P/NP, to purify the water for drinking, food preparation, ice making, coffee/tea.
- **Options for POE** – point of entry systems, to inline filter and treat all the water going into the home, lodge, kitchen area, hostel, B&B. Water treatment include, sediment filtration, toxin, chlorine treatment through active carbon, and options of ultra violet or HTH chemical dosing to treat bacteria, including treatment of e-Coli & faecal coliform bacteria.



Example of a POE, TW2 & 3BB20-UV filtration system. Sediment & Carbon filtration to 5um with SS ultra violet & CB, to kill bacteria & disinfect the water. Inline system – treating all the water on demand up to 3000-5000lt/hr @ max 4bar. Ideal for most domestic water treatment and commercial offices/building, hotels, lodges...



Example of a POU – RO50P/NP, 5 stage, under counter reverse osmosis water PURIFICATION system. Three phases of filtration for dissolved sediment, toxins & chlorine through carbon, membrane filtration to 0.0001 micron and post carbon filtration. Offering a high level of purified water. – Use as a large plant by majority of bottled water producers.



Example of a POE TW3BB20-CTS – via manifold, chemical dosing kill bacteria fist - filtration system. Sediment & Carbon filtration to 5um. Inline system – treating all the water on demand up to 5000lt/hr @ max 4bar. Ideal for areas with power problems and UV not practical & treatment of borehole, river or dam water.



Example of a POU – UF2 or UF3, under counter ULTRA FILTRATION system. NOT REVERSE OSMOSIS but UF membrane filters the water to 0.01 micron. Offers dissolved sediment filtration to 5 micron, toxin & chlorine removal through activated carbon and UF membrane separation technology. Ideal for kitchen and affordable.



Example of a POE – CFP2400/UV filtration system. Sediment & Carbon filtration to 5um with SS ultra violet & CB, to kill bacteria & disinfect the water. Inline system – treating all the water on demand at 2400lt/hr @ max 4bar. Average domestic home flow is range 1800-2400lt/hr at max 4bar. Technical leaflet available on request.



Example of a typical POE - TW3BB20-UV system linked to a ion-exchange hard water lime scale treatment system to first treat the water hardness CaCO3 and then filter and treat the water all on demand. Systems to treat dissolved iron/heavy metals and nitrate look similar to picture on left. Technical leaflets available on request.

To assist with a detailed quote, Nimbus require the following

Following acceptance of the quote estimate, a Nimbus technician or installer need to visit the site to inspect the scope of the work involved, especially trenching and plumbing work required.

REQUIRED WATER STORAGE/TANK SIZE – IF REQUIRED

As a rule, the CSIR guide for water usage in the home is +88-110lt per person per day. Shower/bath, toilets, clothes washing, kitchen/dishes, food prep – no irrigation or pool fill. Or can calculate from your municipal account daily usage.

WATER FILTRATION REQUIRED & LEGAL ISSUE of RISK – Service provider.

Municipal water to tank, SHOULD comply with SANS241 standards for POTABLE WATER. Legally, once you place the water in a storage system, YOU become the service provider and your responsibility to ensure the water 24/7 is safe for human consumption & drinking purposes. Reason why Nimbus suggest water filtration & UV as part of the system.

POWER SUPPLY for water pressure pump and UV system

Nimbus will need a 2 x 220V, 16AMP, external power point close to area of installation for the pump & UV on filtration system. Only a registered electrician may supply & install the power point if not in range of the system.

TANK BASE IF REQUIRED

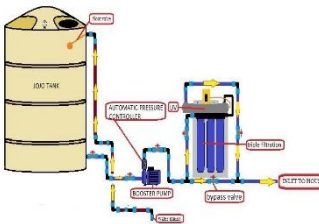
A level compacted area, or building brick/paving, or concrete base area of $Xm^2 \times Ym^2$ is required for the tank. Tank must be level. A full 2500lt tank is 2500kgs, or 2.5 tons, 5000lt tank, 5.0 tons. Nimbus can cost this into our quote or can be done by client appointed contractor to size specification supplied by Nimbus.

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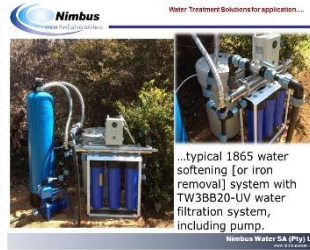
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Example of a POE sized water softening system for application. Sized as a SIMPLEX system, or as part of a filtration system/plant, to treat specific HARD WATER CaCO3 lime scale. To correctly size a water softening system & resin media loading, require a water analysis, showing the Ca & Mg, CaCO3 hardness & Sodium as Na in mg/l.



Example of a typical POE - TW3BB20-UV system linked to a ion-exchange hard water lime scale treatment system to first treat the water hardness CaCO3 and then filter and treat the water all on demand. Systems to treat dissolved iron/heavy metals and nitrate look similar to picture on left. Technical leaflets available on request.

Example of a POE ion-exchange technology, for removal and filter out iron and dissolved heavy metals in water. To correctly calculate the system vessel sizing and BIRM media loading, need a water analysis showing the pH, dissolved iron as Fe in mg/l.



Example of a range of SLIM LINE and BIG BLUE filters available in 10, 20 & 30" for all types of [POE] POINT OF ENRTY or [POU] POINT OF USE water filtration systems. Different sizes of stainless steel, Ultra Violet systems available from Nimbus. Talk to Nimbus for any water treatment system services, repairs and water booster pumps available.

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