

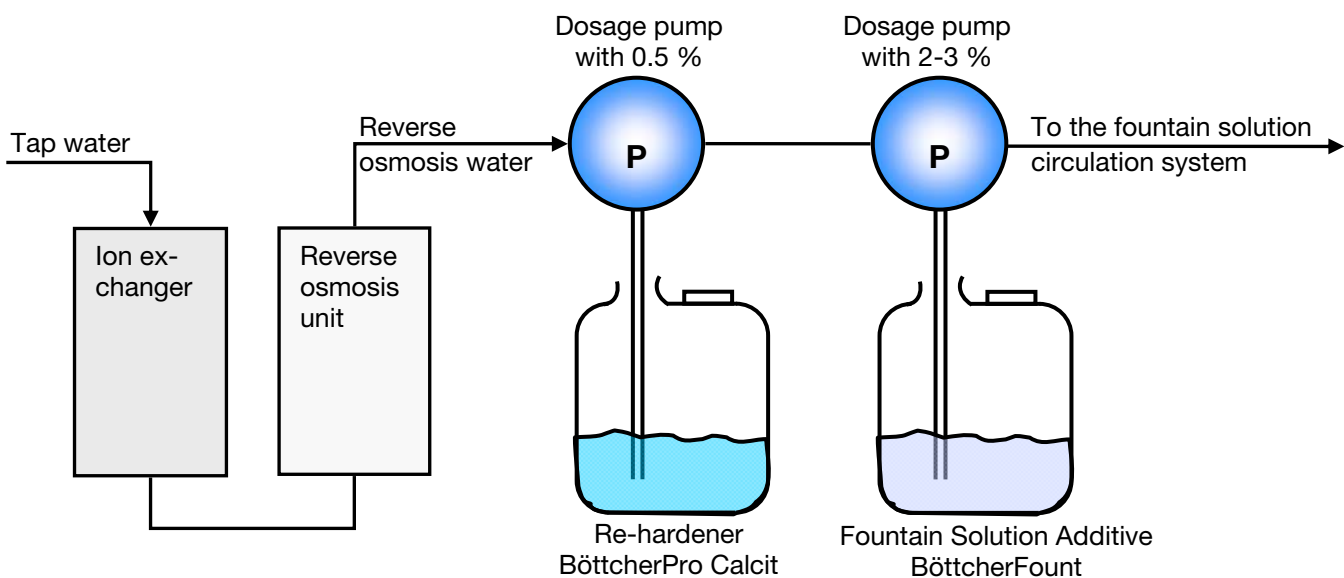
# BöttcherPro Calcit

## Use of Water Re-Hardener

BöttcherPro Calcit is a water re-hardener for use in conjunction with RO (reverse osmosis) water or with very soft water, to standardise the water hardness.

### Application









During the RO process all mineral salts and vegetable/algae in the water are removed. Before use, the completely salt-free water from the RO unit has to be re-hardened with a special re-hardener to the optimum hardness range between 8 to 10° dH (total German hardness) before using it in fountain solutions. BöttcherPro Calcit re-hardener is added at a dosage of 0.5 % to the reverse osmosis water or to the soft water feed lines to the circulation system by the use of automatic dosage pumps. BöttcherPro Calcit works at an optimum with BöttcherFount additives. After adding BöttcherPro Calcit the fount additive is pumped into the water feed line by an automatic dosage pump set at 2 to 3 %, to the re-hardened water, which then flows into the fountain solution circulation system.



Picture: Use of Böttcher Calcit



### Characteristics:

-  for reverse osmosis water
-  for very soft water (0 - 4° dH total German hardness)
-  dosage 0.5 %
-  improves the separation in filtration units
-  constant water hardness of 10° dH (total German hardness)
-  no alteration of pH-value
-  stabilizes the ink-water balance
-  reduces emulsification

### Influence of the water hardness

With a simple test, properties of the re-hardener BöttcherPro Calcit can be demonstrated. A fountain solution additive premixed with soft (or RO) water is shown shared between two bowls. The left bowl does not contain re-hardener, the right bowl contains 5% re-hardener BöttcherPro Calcit; a droplet of ink is dropped into each bowl. After some minutes the ink drop in the left bowl bleeds and the ink drop in the right bowl remain stable. The water hardness is very important for emulsification of the ink. In cases where the ink bleeds the ink-water-balance is unstable and dot gain will increase. With the use of water re-hardener the dot gain is reduced and controlled.

#### Influence on water hardness



In soft water

In soft water + BöttcherPro Calcit