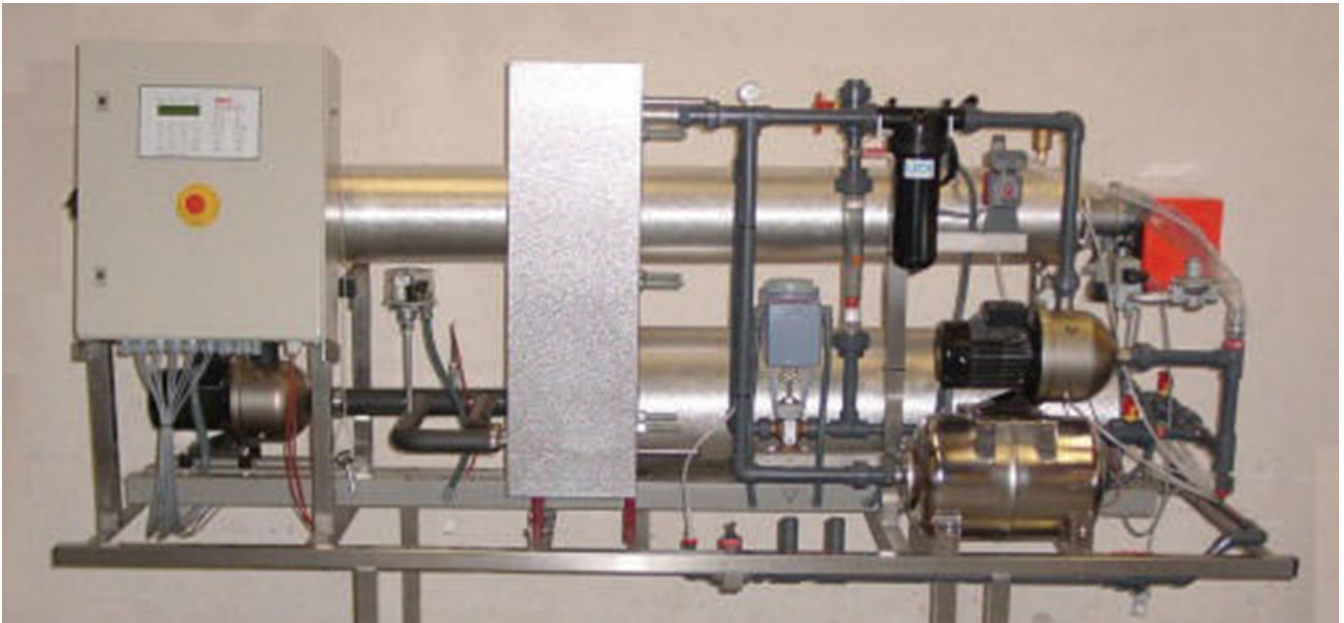


# Heat Treatment

Consistent findings by different researchers have found heating to be a very reliable method for water disinfection.

When using heat treatment, the water is heated to at least 95°C and kept there for a minimum of 30 seconds. This type of procedure will result in a 100% disinfection of drain water, complimented by a high degree of reliability and minimum maintenance.



There has been much discussion about the disinfection temperature. In early trials, a 100% killing of pathogens was achieved at 95°C at an exposure of 10 seconds. For safety, an exposure time of 30 seconds was recommended, at which point nearly everything is killed: bacteria, fungi, viruses and nematodes. Research (Runia, 1998) proved that similar results could be obtained by decreasing the disinfection temperature and increasing the exposure time: 90°C for 2 minutes, or 85°C for 3 minutes.

The big advantage of the latter disinfection temperature is that no extra, external heaters are needed, which makes the unit more competitive. In Australia, natural gas heat treatment becomes a viable option for disinfection.

Contact us to determine if heat treatment is the right solution.