



What is conventional water treatment?

- 💧 The term **conventional water treatment** refers to the treatment of water from a surface water source by a series of processes aimed at removing suspended and colloidal material from the water, disinfecting the water and stabilising the water quality.

What does conventional water treatment involve?

- 💧 Conventional treatment of water for domestic use involves a number of treatment steps aimed at achieving the following objectives:
 - ✓ Removal of suspended and colloidal matter to an acceptable level can be done with the following processes:

PROCESS	DESCRIPTION
Coagulation	A process to change the nature of the colloidal material in the water to facilitate its removal.
Flocculation	A process to form larger groups of particles or flocs.
Sedimentation or flotation	A process to remove the flocs from the water.
Sand filtration	A process for final clean-up of the water.

- 💧 **Disinfection** to produce water that is safe to drink. This process involves the addition of disinfection chemicals to the water. On large-scale plants chlorine gas (but ozone and chlorine dioxide can also be used) is normally used, while on small plants chlorine granules, Ca (OCl) 2 (commercially known as HTH) are often used for disinfection
- 💧 **Chemical stabilisation** of the water to prevent corrosion of pipelines or the formation of chemical scale in distribution systems and fixtures. Chemical stability is achieved by addition of different chemicals, such as lime and/or carbon dioxide to the water.