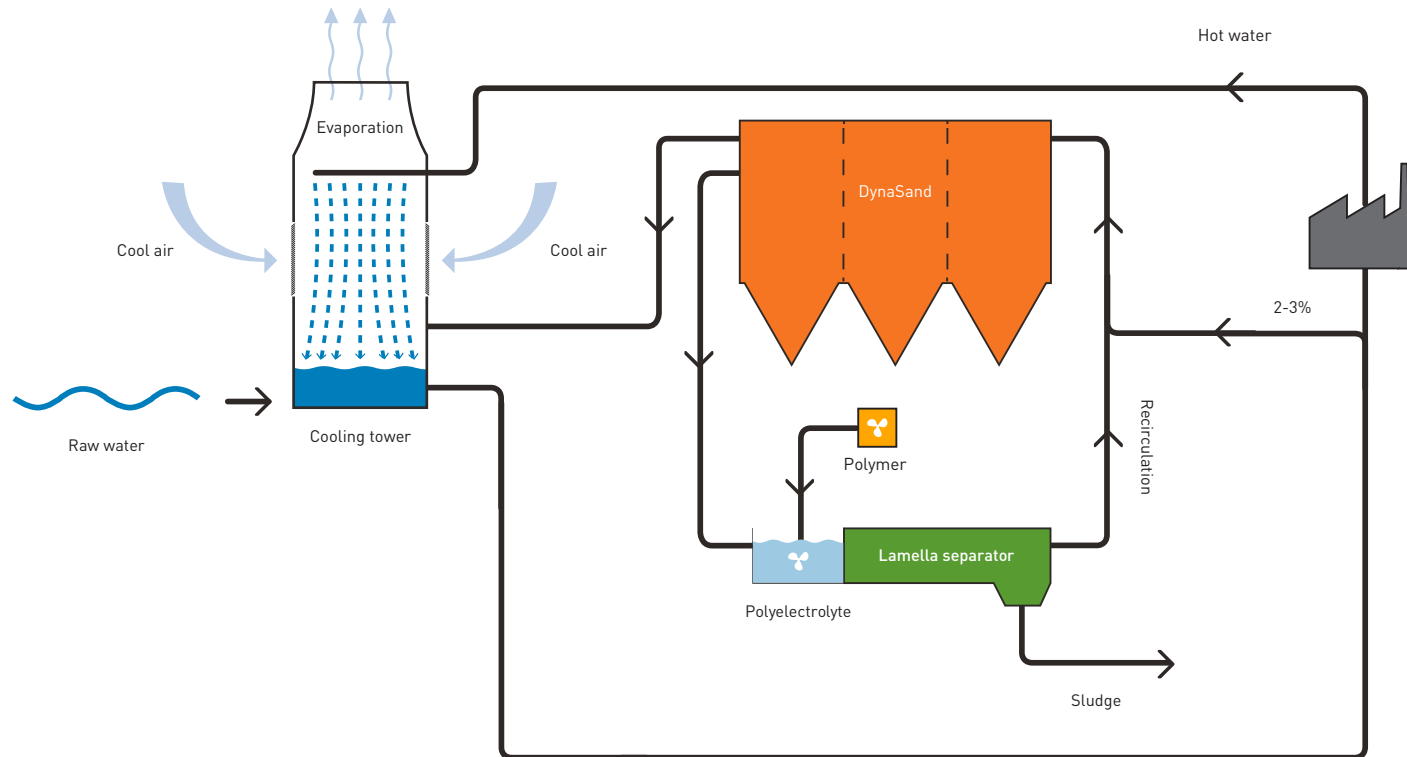


SIDE STREAM FILTRATION

HIGH CAPACITY AND LOW FLUSH WATER LOSS



Many industries need cold water for their production processes. It is often cost-effective to use water as a heat carrier and to cool it down in cooling towers, for example. Particles can easily form in the cold water and need to be separated out of the recirculation system. To avoid having to process the entire recirculation flow, in most cases only around 2-3% is actually treated. This is known as a side stream. In larger industries, this apparently low flow can reach several thousand m³/h.

High capacity and low flush water loss

The DynaSand filter's continuous washing process and simplicity can also be used to good effect in the side stream flow. The particle contents can be quite high, as can the flow of water. To keep the number of filters to a minimum, these systems are often designed for flow rates up to 15-18 m/h. Conventional backwashing filters cannot cope with these kinds of rates, which would result in very high levels of flush water loss. To reduce the total amount of flush water

even further, our lamella separators are often used as an additional means of stopping recirculation. In that case, the amount of flush water lost from the system amounts to no more than around 0.01% of the total recirculation flow, small volumes of sludge that can then be processed on site using a centrifuge or a similar system. With Nordic Water's side stream filtration process for cold water recirculation, total investment and operating costs are significantly reduced.

Input values:
SS: approx. 30-70 mg/l
Oil: < 50 mg/l

Output values:
5-10 mg/l
< 5 mg/l