LIQTECH

FLUE GAS CONDENSATE CLEANING CASE

Silicon Carbide Membrane Systems Making A Difference In Power Plants

The Case

In order to maintain its discharge limit values, Vestervig District Heating A.M.B.A. purchased a HydraSiC plant from LiqTech.

Head of Operations at Vestervig District Heating, Preben Bjerre, appreciates not having to worry about maintaining the discharge limit values on e.g. cadmium in the wastewater from the flue gas condensation process at the wood chip fired district heating facility in Thy, Jutland.

A new HydraSiC ultrafiltration unit featuring silicon carbide membranes from LiqTech will deliver a high and consistent water quality of the condensate water from the plant scrubber tower.

The Solution

The HydraSiC system consists of three units - HydraSiC ultrafiltration unit (UF) - Precipitation unit - Filter press dewatering unit

The system has been designed to handle and treat a maximum condensate flow of 1.2 m³/h
(5.3 GPM) with the boiler running at full capacity (effect of 3,5MW and fuel containing 55% moisture).

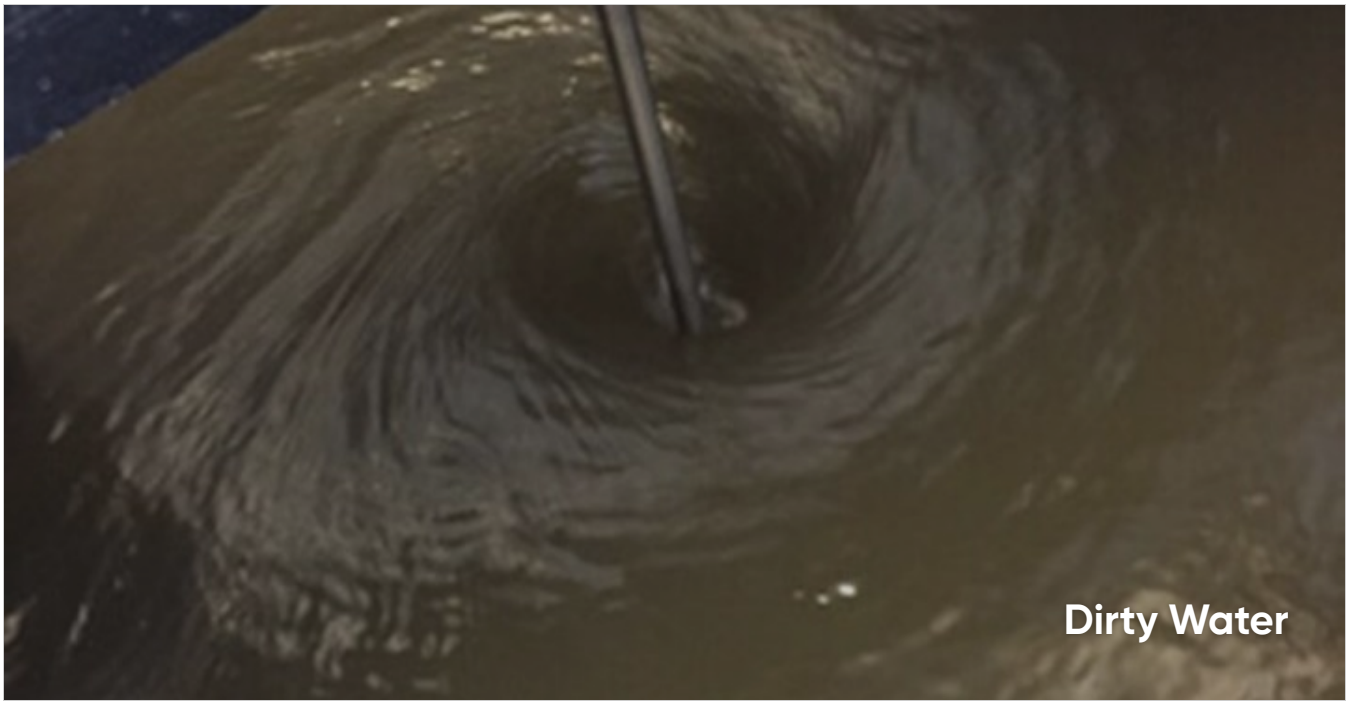
HydraSiC is a standardized range of ultrafiltration units based on LiqTechs robust and reliable silicon carbide membranes (SiC).

The HydraSiC systems are available either as semi- or fully-automated units capable of handling considerable variations in the feed water quality and designed to treat flows as high as 16 m³/h (71 GPM).

Wastewater treated with SiC ultrafiltration contains:

- TSS < 0,5 mg/
- Cd < 0,15 µg/l
- Hg <0,05 µg/l
- SDI < 3 = Suitable for RO treatment

UF treated flue gas condensate refined by reverse osmosis (RO) may be reused as transmission grid make-up water-saving both potable water and money.


Dirty Water

Clean Water

LiqTech
LiqTech

Talk to an Expert

Please do not hesitate to contact us if you need help with a liquid filtration system.

Newsletter sign-up