



Dow Deutschland, Werk Stade

Process water and demineralised water

Client

The Dow Chemical Company is one of the largest chemical manufacturers, operating in some 160 countries and employing over 56,000 people worldwide. Germany is the second outlet, with 16 factories and 4,800 employees. At the factory in Stade, Dow produces base and specialty chemicals. For this Dow needs process and demineralised water.

Case

By expanding production capacity in 2002, also the steam production increased sharply towards 300 Megawatt (thermal) which means that more highly purified water was needed. Since water treatment is not one of Dow's core activities, it was decided to outsource this activity to Evides Stade Wasserbetrieb GMBH, a subsidiary of Evides Industriewater. This choice resulted from Evides' collaboration with the Dow facility in Terneuzen.

Solution

Evides upgraded and extended the existing demin water plant (ion exchange), and built a new process water plant on the basis of a DBFO-contract (Design, Build, Finance & Operate). This means that Evides takes responsibility for the complete water management, including long-term operations. The process water is partly supplied to Dow, but also feeds the demin water plant. The installation has been designed in such a way that the varying composition of the raw Elbe water can be treated. By using surface water, drinking water is no longer used for industrial purposes. The new plant also involves energy savings and reduction in the use of chemicals. This results in cost savings and a reduced burden on the environment. The partnership between Dow and Evides provides reliability and a guarantee of supply. Evides' expertise in water treatment allows Dow to concentrate on their core activities.



Your partner for water management

Evides Industriewater is part of Evides, the drinking water company in the Southwestern part of the Netherlands and has been a reliable and inventive water partner for the industrial sector since 1968. Evides Industriewater supplies 100 million m³ of process water each year (partly via re-use solutions) and treats a similar quantity of wastewater.

These services are provided via 77 assets and 13 DBFO sites, which are built, owned and operated by Evides Industriewater throughout North-West Europe.

Features

Start of operation
2003

Product
Process water,
demin water in three different
qualities

Source
Surface water from Elbe river,
condensate

Maximum capacity
Demin water: 800m³/hr;
Process water: 200 m³/hr
(+ 940 m³/hr as feed water for
the demin plant)

Technology
Process water: coagulation,
flocculation, lamella separation and
multimedia filtration
Demin water: ion exchange (cation,
degasification, anion and mixed bed
filtration)

