

## ION EXCHANGE

### Description/Application

Ion exchangers are units to exchange dissolved ions with other ions. The water to be treated is passed through columns filled with exchanger material in most of the cases. The ions to be exchanged are bound to the exchanger material, which on his part releases other ions into the liquid.

The process of ion exchange is a reversible process, so that exchanger material can be regenerated with special salt solutions or acids.

The relevant know-how of this method lies in the technical and most economic combination of cationic and anionic ion exchangers, as well as the performance of the regeneration.

### Experience and application

Delta Umwelt-Technik GmbH uses ion exchanger for following applications/process steps:

- demineralisation/decarbonisation of process waters,
- demineralisation of boiler feed water (depending on the pressure range in combination with reverse osmosis and inhibitors),
- as selective exchanger to separate special ions (i.e. cyanide).

