

The **DEamMON**ification process is an energy-saving water treatment technology. It is based on the anammox-reaction, in which nitrite is denitrified using ammonia as electron donor. The process was developed at the University of Innsbruck, Austria. This results in significant savings when compared to conventional nitrification-denitrification processes:

- 50 % on energy for nitrification, since only half of the influent ammonia load needs to be nitrified;
- 100 % savings on carbon source, since ammonia is used as electron donor.

Three full scale DEMON plants are in operation, in Austria, Switzerland and Germany. Three DEMON-plants have been commissioned over the last three years. Start-up of the DEMON-plant in Plettenberg, Germany, took less than one week.

Country	Location	Commissioned	Design load (kg N/d)
Austria	Strass	2004	250
Switzerland	Glarnerland	2006	200
Germany	Plettenberg	2007	50

DEMON - Apeldoorn, Netherlands

The plant for Waterschap Veluwe is not only going to be the first of such plants in the Netherlands but will also be the largest of its kind in the world. The Grontmij - Logisticon Waterbehandeling (water treatment) combination finished construction in the summer of 2009. The plant is starting up over the winter of 2009-2010.