



Lahnstein, Germany

WWTP Data

Type of WWTP	Municipal, approx. 30% industrial
Capacity	44.000 PE
Biological Stage	2-lanes
	Combi-tank (total: 4.200 m ³)
Operation	intermitting
Treatment	Denitrification P-elimination (precipitation)
Installation Cleartec® Biotextil	28 modules/tank



Why did they upgrade WWTP?

In order still to be permitted to discharge purified wastewater into the Rhine River WWTP Lahnstein-Braubach has to meet higher requirements regarding N-elimination. In the course of measures the plant's capacity was increased from 20.000 PE to 44.000 PE.

Why IFAS?

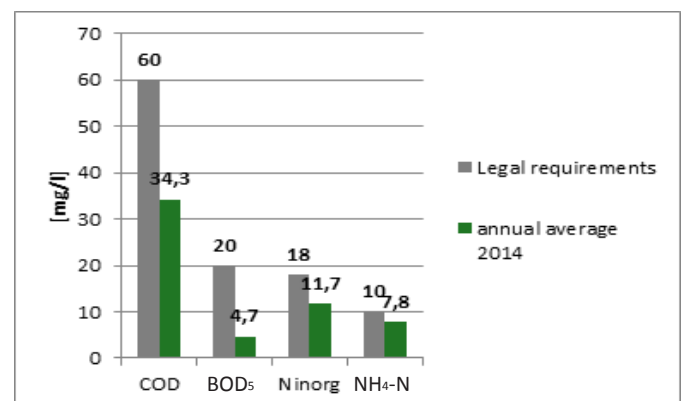
One of the ambition of expanding the WWTP is to facilitate the integration of existing system components into the new plant design. The new aeration tanks are constructed as a ring and were built around the existing clarifiers. These combitanks were equipped with Cleartec® Biotextil modules right from the start to increase the treatment performance of the intermittent operation particularly with respect to the N_{inorg} -consent value. The modules are retrievable, diffusers are easy to maintain or replace if necessary, without draining the tanks.

Which results are reached by IFAS?

	Biological Efficiency [%]	
	1998 (without Cleartec® Biotextil)	2014 (with Cleartec® Biotextil)
COD	93,5	96,4
BOD ₅	97,8	99,0
NH ₄ -N	69,0	88,0*

*operated intermitting

Values clearly show that after installation of Cleartec® Biotextil a higher biological degradation regarding ammonium could be reached despite intermittently operating mode.



Jäger Umwelt-Technik GmbH
 Ruscheplattenstraße 14
 31137 Hildesheim
 Germany
 ☎ +49 5121 9138 900
 📠 +49 5121 9138 999
 www.jaeger-envirotech.com
 info@jaeger-envirotech.com



Disclaimer

We exclude any liability for the information and product presentations provided. Contents of technical character are based on the date of publication. Existing copyrights and rights to the use of names remain unaffected.

