



BROWAR FORTUNA - Poland
Biological Treatment of waste water

Browar Fortuna is a brewery located in Miloslaw, a small town in the west of Poland. The brewery was established in 1889 and has since experienced several periods of prosperity and decline. In 1995 the brewery was returned to its pre-war owners. This marked the beginning of a period of renewal. Ever since, the brewery has grown into a major Polish beer producer.

In 2011 Trevi was involved in the construction of the first biological wastewater treatment plant. The increase in production caused an increase in discharge. Initially, the wastewater treatment plant consisted of a single container for a flow of a few cubic metres per day. Over time, however, the plant grew to a complex of three container units. The treated effluent is discharged into surface water that is connected to carp breeding ponds and must therefore be of high quality.



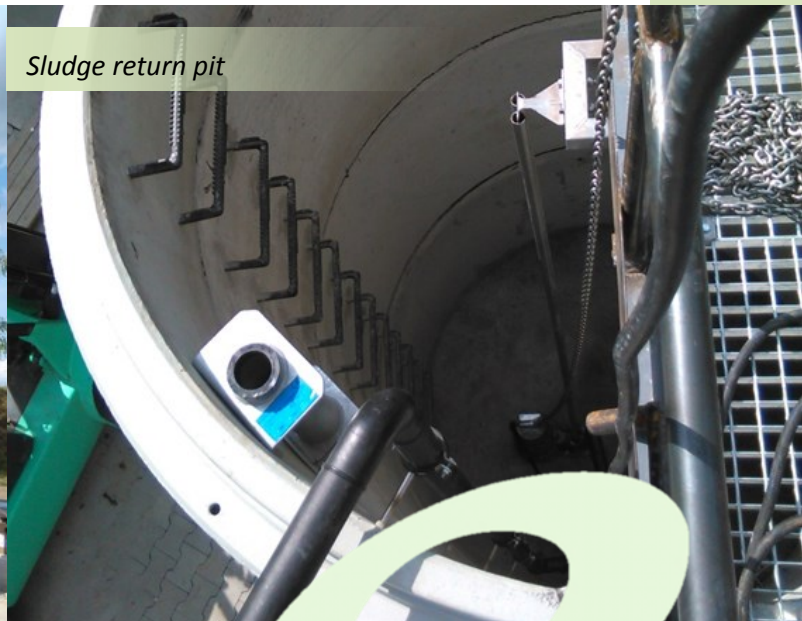
From 2014 onwards, a growing proportion of the waste water is being discharged into the public sewage system. This necessitates a further increase in scale. The flow had now increased to > 50 m³/day with an average concentration of organic pollution of > 4000 mg/L COD. The container principle was no longer feasible and the new design required an external partner for the construction works. The plant became a full-scale biological wastewater treatment plant with a useful volume of 1000 m³, a settling tank with an area of 85 m² and a capacity of approximately 250 m³ wastewater/day.

In order to stay within the budget, the project was split into 2 phases. In the first phase, biological wastewater treatment was executed as a sequencing batch process, i.e. without the clarifier. In the second phase, the clarifier and sludge processing were added. The clarifier is constructed

with 2 supply lines, so that a possible third phase and further doubling of the capacity is possible.

In Poland, even more than in Belgium, a high degree of sludge dewatering is extremely important in order to reduce the processing costs. For this reason, a centrifuge was selected for the sludge processing technology.

This centrifuge, together with the electrical cabinet, feed pump, flocculant production and measuring equipment, was mounted in a container at Trevi in Gentbrugge and plugged in on site. To simplify the process, the container was put on an elevation. As a result, the centrifuge and the sludge transport do not require any pumps.



Trevi nv
Dulle-Grietlaan 17/1
9050 Gentbrugge
Belgium

T +32 9 220 05 77
F +32 9 222 88 89
E info@trevi-env.com
S www.trevi-env.com

ISO 14001
ISO 9001
VCA
BE 0477.717.158

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