

Food & Beverages Surface Water Treatment

Nigerian Breweries plc, Ibadan, Nigeria

How we created value

- High capacity plant dramatically reduces turbidity in surface water
- Waste backwash water recycled in the process



Surface water treatment plant in Nigeria, capacity 125 m³/h



The Nigerian Breweries plc, based in Ibadan, were aiming to expand their treatment plant to filter surface water. After post-treatment with existing equipment at the brewery, the filtered water was to be used as a basis for different types of water, such as brew water and boiler feed water.

Heineken Supply Chain awarded Ovivo Holland the contract for the delivery of this water treatment plant, to have a total capacity of 126 m³/h.

Plant configuration

The main components of the supplied water treatment plant are:

- 4 dosing units, for chlorine, caustic, flocculant and polyelectrolyte
- 2x50% lamella separators, each 64 m³/h
- 4x25% continuously operating sand filters, each 32 m³/h
- 1 wash water recovery station

Process

The main purpose of the plant is the removal of particles, suspended

solids and colloidal matter. Due to the high raw water turbidity found in Nigeria during the rainy season, water treatment is a two stage process: lamella separators remove the bulk of the dirt, followed by continuously operating sand filters with a polishing function. Waste backwash water from the sand filters is returned to the inlet of the lamella separators to minimize water loss.

Performance of the water treatment plant

Capacity		126	m ³ /h
Turbidity	influent	≤ 75	NTU
	effluent	< 1	NTU

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