

Fine Filtration for Bottle Washing Caustic Adelholzener Alpenquellen GmbH

Background:

The customer Adelholzener Alpenquellen GmbH is a German producer for mineral water, shandies and carbonated soft drinks and well known for its high-quality natural products. These products are mainly filled in 0,75 and 1,0 l company owned returnable glass bottles with paper labels. To ensure the highest quality in products in combination with reliable production efficiency the customer decided for a caustic fine filtration system from BOLL & KIRCH. The main target was a continuous and reliable reduction of contaminants for a homogenous cleaning efficiency of the main caustic.

Description of the solution:

The BOLL FFU BWM cross flow microfiltration consists of one membrane module for 12 tubular ceramic membranes designed for fully automated operation mode. The unit is installed behind a BOLLFILTER Automatic Type 6.64. It filters in a partial stream the caustic out of the main caustic bath and supplies a spray bar, cleaning the outer surface of the bottles which are on the way to the post treatment units, with clean filtered main caustic.

Advantages and added value for the customer:

Contamination level in the caustic was substantially reduced. The turbidity of the main caustic already decreased tremendously by more than 80 % within the first 72 hours and middle to long term by almost 90 % constantly. Carry-over of dirt freight to the post treatment segments of the bottle washing machine is also constantly reduced by over 80 %.

The result is a constantly higher caustic quality with a significantly increased cleaning efficiency and a more reliable process security in general.

Customer: Adelholzener Alpenquellen GmbH

System: BOLL & KIRCH FFU 12.1 BWM



BOLL & KIRCH Fine Filtration Unit FFU 12.1 BWM

	Main Caustic	Water Baths
Before commissioning	900 NTU	6 NTU
Two months later	app. 100 NTU	app. 1 NTU

Turbidity reduction by caustic fine filtration