



Thomas Stanke (left), Head of Quality Assurance at Campina's Cologne plant and Peter Winterberg (right), manager of the quark department



Campina operates six plants at different locations in Germany. Each site specialises in certain products. Measured by the volume of milk processed (540 million litres), the plant in Cologne is the largest. Here, a wide range of fresh milk, UHT milk, quark, cream, yogurt and milkshakes is produced. Thomas Stanke, Head of Quality Assurance, is responsible for monitoring quality and sets quality standards with UV-C disinfection of tops in deep-drawing machines.

*UV-C emitters from BÄRO integrated in the deep-drawing machine ensure disinfection of the foil lids*

## Disinfection of foil lids prevents complaints

Thomas Stanke: „In the past we received approximately five complaints a year from consumers concerning problems with our 250 g and 500 g pots of natural quark before expiration of the best-before date. Mould on the product surface was the reason for this. In October 2005 this prompted us to contact the disinfection specialists BÄRO. In a four-week test phase we used UV-C radiation for disinfection purposes for the first time.“ Stanke goes on to say that disinfection is now carried out by means of UV-C emitters integrated in the deep-drawing machine which the tops for the pots pass through. The UV-C radiation with a wavelength of exactly 253.7 nm destroys micro-organisms such as bacteria, moulds, yeasts and viruses. “We tested approximately 2,500 pots in the test phase and could not find any signs of contamination on the product surface”, Stanke says. “Due to the positive results, in December 2005 we decided to equip a second deep-drawing machine with UV-C low-pressure emitters from BÄRO.

That was a very good decision because since then we have not received any more complaints from consumers.”

### Disinfection efficiency improved, health risks eliminated

The positive experience with UV-C disinfection prompted Campina to implement a further measure. Whereas previously the foil tops of a third deep-drawing machine for filling quark dessert products were disinfected by means of hydrogen peroxide in a standard chemical process, now the company prefers to use the advantages of physics here as well and has changed the disinfection process. Thomas Stanke says: “Although we weren't aware of any hygiene problems with this filling machine, we nevertheless decided to switch from chemicals to UV-C disinfection in order to improve disinfection efficiency and our employees' health. This also leads to cost savings as we no longer have overheads for chemicals.”

### Perfect integration of emitters, no health risks

The integration of the UV-C emitters in the deep-drawing machines was perfectly prepared and coordinated between BÄRO and Campina's HVACR staff. Following cleaning of the machines, installation of the systems only took around two hours. The emitters were positioned at precisely defined points and aligned so that the foil tops passing through are fully exposed to UV-C radiation although no radiation whatever escapes outside the machine for the protection of employees'

health. Thomas Stanke says: “After nine months experience coupled with the positive results we are currently examining four further areas of application for UV-C disinfection here at our facility. After all, guaranteeing our product quality has top priority.”

For further information call ++49 (0) 21 / 799-505 or visit [www.baero.de](http://www.baero.de)

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