Filter monitoring with ITM-4 when bottling sparkling wine

The application

Before sparkling wine is bottled, it is subjected to cross-flow microfiltration. The ITM-4 monitors the filtration quality at the CF filter outlet.

The requirement

Ideally, a filter cake is not formed during cross-flow filtration. The filtrate and permeate are permanently separated without requiring filter cleaning. Since this best case scenario depends on various parameters (such as chemical properties, transmembrane pressure differences, etc.) and can never be achieved to 100 %, sparkling wine purity must be monitored by a reliable method. Until now, this was done by visually checking the filter.

The Negele solution

The ITM-4 continuously monitors sparkling wine purity at the filter outlet prior to bottling. The tolerated limit value is between 0.2 and 0.5 NTU, depending on the sparkling wine variety. If the limit value is exceeded, the bottling process is halted immediately and the filter is cleaned.

The advantages

- Changing to this automatic solution guarantees constant product quality.
- In addition, it leads to time savings by eliminating the need for repeated visual monitoring.

Why the Schlosskellerei Affaltrach chose NEGELE

- The four-beam principle offers high measurement accuracy at very low turbidities, independent of the shape and size of the particles.
- In addition to a standard signal of 4...20 mA, the device has a programmable switch output.
- The compact unit, made of high quality materials and accompanied by powerful electronics, offers an excellent price-performance ratio compared to similar devices on the market.

Customer

Schlosskellerei Affaltrach KG
74182 Obersulm-Affaltrach

SCHLOSS AFFALTRACH®
1928 bis heute.

Turbidity meter ITM-4

Schematic diagram of bottling process

Pump — Filtration “B” — Filtration “C” — Purity monitoring — Bottling — Final product

08.11.10 / 1.0 / EB / at-ac.de

Negele Messtechnik GmbH · D-87743 Egg a. d. Günz · Telefon +49 (0) 83 33 / 92 04-0 · Fax +49 (0) 83 33 / 92 04-49 · www.negele.net