

# How the fermentation cellar is automated

## The Fermentation Monitor QWX43

### The key advantages at a glance.

#### Efficient and simple automation:

- Precise, repeatable measurements replace manual samples and laboratory analyses while avoiding product waste
- All key fermentation parameters are updated every minute, thus enabling automation of the process and optimal plant availability
- Continuous overview of the fermentation process avoids the need to rework batches
- Recalibration or readjustment is not required

#### Self-explanatory and practical:

- Data-managed process improvements through comparisons with previous batches and automatic notifications
- Explicit parameters in the process control system and in the Endress+Hauser Netilion Cloud
- Simple commissioning
- Hygienic design enables tank-integrated cleaning



With the Fermentation Monitor QWX43 you can retrieve the measured values of your beer from anywhere.

**Fermentation Monitor QWX43 helps you increase process efficiency and reduce costs. It continuously monitors all parameters that are important to the fermentation process of your beer. This multisensor system supplies precise measurement values that can be used for process automation direct in the process control system or for process monitoring via the Netilion cloud system.**

Reference measurements are traditionally carried out in the lab once or twice a day in order to control the process. This can take 10 to 15 minutes per tank, including preparation of the samples. When using the laboratory method, the end of the fermentation process or the ideal point in time for carbonation can only be approximated with an extensive delay. Without continuous process data, automation of the fermentation process is not possible and optimal utilization of the plant unrealistic.

#### Precise measurement in real-time

The Fermentation Monitor QWX43 closes these data gaps by measuring in real-time key fermentation parameters such as original wort, extract, alcohol content and fermentation degree, temperature and much more. Because it features multisensor technology, the instrument requires no predefined start parameters. The data can be used to control the fermentation process directly in the process control system or for monitoring and optimization applications in the Endress+Hauser Netilion app via an internet-capable device.



*„The Fermentation Monitor QWX43 helps us see immediately if something is not right with the fermentation level. Then, for example, you can then interrupt the process at an early stage and replace the yeast. We could never achieve such precision with the twice-daily spindle samples, which merely provide a snapshot of a highly changeable process, not even in combination with laboratory analysis.“*

Joachim Rogg, "Familienbrauerei Rogg", Lenzkirch



*„The Fermentation Monitor QWX43 has more than just a monitoring function for us. It is integrated into the process control system and individual steps, such as valve control or activation of the cooling system, are automatically adjusted based on the values it transmits. This enables us to achieve a high degree of automation in the fermentation process, which pays off for us.“*

Armin Pillmeier, "Pillmeier Bräu", Langquaid



*„The Fermentation Monitor QWX43 allowed me to reduce my production effort by around 10 percent. The first thing I do in the morning is check my phone to see how the beer is doing. It's really exciting to retrieve the values time and again. Thanks to this reassurance, I can also enjoy my free time much more than before.“*

Barbara Lohmeier, "Bräu z'Loh", Dorfen

### Self-explanatory and practical

The Fermentation Monitor QWX43 makes process automation and monitoring easy because it can be connected to most existing process fittings and does not have to be configured or calibrated on-site. Commissioning can be completed within just a few minutes, after which the instrument then operates on its own.

Users furthermore value the reduced effort in terms of documenting the measurement values since these are created automatically via the process control system or the Netilion platform.

The instrument enables simple process automation and a wide range of process optimization possibilities. Users can automatically carbonate the tank or select the optimal point in time for activation of the cooling after the diacetyl rest.

Continuous process monitoring makes it possible to detect problems at an early stage and respond accordingly. By comparing current batches to a "golden batch", brewers can identify and implement process optimizations.

Last but not least, the Fermentation Monitor QWX43 eliminates the effort required to draw and analyze laboratory samples. The measurement values can be retrieved at any time, and from anywhere.

For more information about the Fermentation Monitor QWX43 please scan the QR code.



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Endress+Hauser 

People for Process Automation