Anton Paar


# Hofbräu München and Anton Paar: **Brewing Classic Beer Together**

**Relevant for the brewing industry**


→ Hofbräu München is one of the world's most famous beer halls

Located in Munich, Germany, the "Hofbräu München" brewery brews the beer for the "Hofbräuhaus," one of the world's most famous beer halls. With Anton Paar's help, it produces well over 340,000 hectoliters of beer annually.

**Modern technology, centuries of tradition**
With around 130 employees, Hofbräu München brews 16 different types of beer – top and bottom fermented, light and dark, and even some special beers like bock. Leveraging modern sensor and production technologies to measure everything from wort to bottled beer, the quality control (QC) team at Hofbräu München ensures that Hofbräu München's beer has its expected taste, complies with regulatory standards, and meets high quality standards.

And it has been doing this with Anton Paar instruments since the 1990s.

**A trust-based partnership**
According to Christian Beetz, brewer and deputy laboratory manager at the brewery, "With a reputation for producing stable, practical, and precise instruments, we knew we could trust Anton Paar." So Hofbräu München has steadily expanded its measuring points with Anton Paar devices and built them into its QC network.

"Since we had so many parameters we needed to measure," remembers Beetz, head of quality assurance Thomas Brandt bought two of Anton Paar's Alcolyzer Beer Analyzing Systems to automatically analyze alcohol and other parameters in our laboratory." The brewery also uses inline sensors and portable instruments for the measurement of density (extract), dissolved $CO_2$, and $O_2$.


→ At Hofbräu München, inline sensors are calibrated and adjusted with values measured by lab instruments at the push of a button via Anton Paar's Davis 5 software.

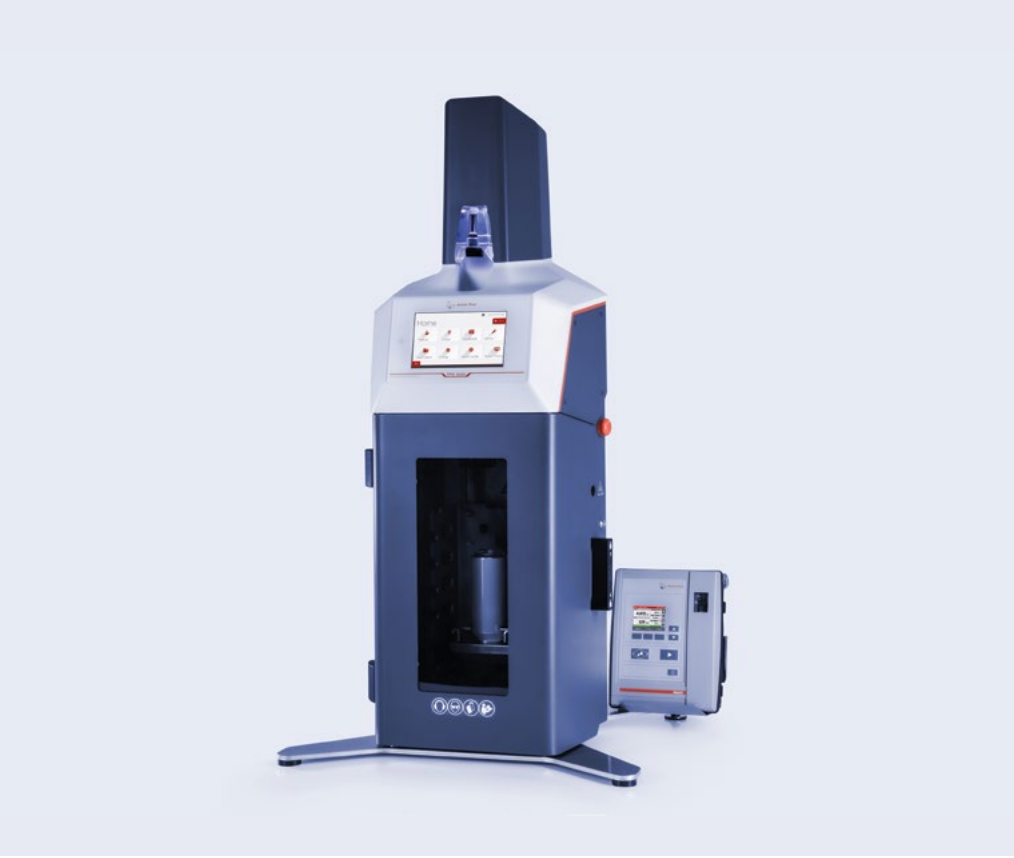
**One solution covers it all**

With its Anton Paar instruments, the brewery can measure over 15 parameters, including original extract, alcohol, dissolved carbon dioxide and oxygen, total packaged oxygen, turbidity, color, and pH. It can do this inline, at-line, and in the laboratory.

As one member of the QC team at the brewery points out, Anton Paar's all-in-one measuring solution is a major benefit for his team. "I only have to have contact with one to two people. All inline devices are compatible with the same software, and all of them are collected and visualized on the same user interface." Moreover, Davis 5, Anton Paar's data visualization software, lets him calibrate and adjust his inline devices with laboratory values at the push of a button.

“Every challenge is also an opportunity. And that’s how we approach our day-to-day work here at the Hofbräuhaus with Anton Paar’s help.”

**Christian Beetz, brewer and deputy laboratory manager at Hofbräu München**



→ Anton Paar’s TPO 5000 measures total package oxygen in down to four minutes. For simultaneous measurement of dissolved $CO_2$, the instrument is simply connected to a CarboQC $CO_2$ meter.

**Measuring total packaged oxygen**
Until recently, the lab team in the brewery had been using the caustic potash solution (KOH) to determine total packaged oxygen, which is an inconvenient, time-consuming technique that produces inaccurate, non-repeatable results.

Since 2021, the brewery has been using Anton Paar’s TPO 5000 total packaged oxygen meter, which has made the measuring process more straightforward, faster, and more accurate. With TPO 5000, Beetz says, the team can “measure headspace and dissolved oxygen separately. It’s much easier now for us. I insert a bottle into the instrument and after just a few minutes, I get a reliable result that is fully comparable with other measurements made on other Anton Paar devices. That’s great.”

**Future challenges, future opportunities**
Hofbräu München has more beverage brands than ever, and its portfolio will continue to expand. For Beetz and his team, this means more effort in the laboratory and a higher demand for measurement technologies that are fast and practical. “Seeing what the future holds for automated measurements, particularly regarding speed. Getting faster in this area would be a fascinating development.”

Another challenge is lowering oxygen values to ensure beer stability. Since beer is being transported farther than ever before storage times are also getting longer. “Because of this,” says Beetz, “we have to ensure only beer that is stable over the long-term is put into the bottles. This is critical so that we make sure every consumer gets that same Hofbräu beer taste that we are known for.”

While the QC team at Hofbräu München acknowledge these obstacles for the future, the team is confident that the brewery will overcome them – just as it has for over 400 years. Every challenge is also an opportunity. And that’s how the QC team approaches its day-to-day work at Hofbräu München.

→ For many years, all beer samples at Hofbräu München have been measured by Anton Paar's Alcolyzer Beer Analyzing Systems, delivering all key parameters relevant for QC with one sample filling, at the push of a button.

"We knew we could trust Anton Paar."

**Christian Beetz,**
**brewer and deputy laboratory manager**
**at Hofbräu München**

**FIND OUT** MORE

**www.anton-paar.com/apr-tpo-5000**

**Instruments:** Beer Analyzing System, TPO 5000, CarboQC, PFD

**Samples:** All common styles of beer. All non-pulp containing.

**Alcohol:** 0.01 %v/v*

**pH:** 0.02* (in the range pH 3 to pH 7)

**$CO_2$:** ±0.01 g/L* (0.005 vol.)

**TPO:** ±8 ppb or ±6 %, whichever is the greater* (trace sensor)

* Repeatability s.d.