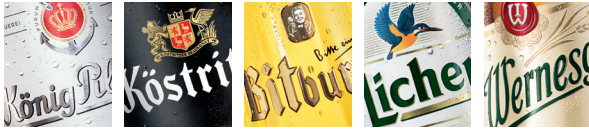


## speedwave XPERT in use at Bitburger Brewery Group



**BITBURGER BRAUGRUPPE**  
S T A R K E M A R K E N

### User

The Bitburger Brewery Group brews and markets solely beers of premium quality and ranks amongst the leading brewery groups in Germany. The Bitburger Brewery Group unites the five traditional brands of Bitburger, Köstritzer, König Pilsner, Licher and Wernesgrüner. Furthermore, a licensing partnership with Benediktiner Weißbräu GmbH has been established. The Bitburger Brewery Group, with headquarters in Bitburg in the region of the Eifel mountains in Germany, is a family business and employs around 1,800 people. With its courage to make constant change, an outstanding power of innovation and the self-imposed obligation to ensure the highest quality at all levels, the Bitburger Brewery Group pursues the goal of a stable and long-term value growth to secure the company's future and successfully pass the business on to the next generation of the family.

The central laboratory of the Bitburger Brewery Group is located in Bitburg, Germany, and occupies 15 employees. The field of activity consists of analytics of raw materials and beer as part of the brewing process, as well as special analytics of flavourings, contaminants and residues using GC-, LC- and ICP-MS.

### Product

The Berghof microwave digestion system **speedwave XPERT** with DAP-60 vessels is used.

### Application

The central laboratory uses the **speedwave XPERT** mainly for digestions of malt samples. Their element concentration is analysed by means of ICP-MS, afterwards. Further sample types are, amongst others, cloudy beer and raw materials. The digestion process is operated using nitric acid and hydrogen peroxide at temperatures of around 180 °C and pressures of around 20 bar.

### Customer Testimonial

„The handling of the DAP-60 vessels is very easy, especially when using the enlarging system. Thanks to the automatic turn function of the rotary plate, inserting the vessels into the rotor is very comfortable.

Compared to the speedwave Four, the speedwave XPERT has improved exhaust pipes, as well as an improved software. Furthermore, the Optical Temperature Cut-Off system (OTC) of the speedwave XPERT allows the monitoring of the vessel temperature, making the handling of the vessels even easier.

For those vessels, that are closed with OPC-caps (Optical Pressure Control), the user can control the internal vessel pressure during the application process. By doing so, potential exothermic reactions can be detected. In case of an unpredicted spontaneous exothermic reaction and the burst of the rupture disc, the exhaust pipe and the neutralisation unit avoid the leakage of nitrous gases.

A big advantage of the Berghof instrument over competitors' products are the high maximum working pressure of the vessels and the separate control unit. Thereby, the risk of corrosion of the electronic assembly caused by nitrous gases is minimized and repair costs sink.“

Dr. Regina Bruhn (Central Laboratory Research/Development Bitburger Brewery Group)