

A row of large, stainless steel brewing kettles in a modern brewery. The kettles are arranged in a line, receding into the distance. They have conical bottoms and various pipes and valves on top. The background shows large windows with greenery outside. The floor is a light-colored, polished concrete.

# Brewhouse technology

**BrauKon**  
*for Beer with Character*

For Beer with Character

# Brewhouse technology

*The best quality wort for the best quality beer*

The brewhouse is the heart of every brewery and therefore crucial to the quality of the beer. BrauKon's brewhouse technology guarantees an effective, economic and at the same time gentle production of wort without compromising on beer quality. Above all, the focus lies in addition to economic advantages, ultimate flexibility and easy handling on the highest quality wort with high extract yields.

## Overview brewhouse technology

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### BrauKon AlloySius

The high performance pre-mashing system mixes malt grist and water simultaneously and thereby shortens mashing and lautering times.

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### BrauKon GentleMix

The flow-optimized mixing system guarantees a uniform temperature distribution in the mash, protects the husks and thereby increases yields.

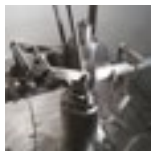
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### BrauKon SmartBoil

The intelligent, gentle boiling system affords brewers an economically efficient and flexible boiling of wort.

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### BrauKon SpeedKon

The efficient lauter system combines benefits such as outstanding wort quality, flexibility, high extraction yields and easy automation.

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*BrauKon AlloySius*

# BrauKon AlloySius

*The high-performance pre-mashing system*

BrauKon AlloySius generates due to the specific guidance of the grist and water a dynamic mixing zone. Thereby, a homogeneous mash is created during the mashing-in process. Even at highest throughput levels and with thick mashes, AlloySius operates completely dust and lump-free.

## Increased yields with minimum lautering times

The AlloySius proven pre-mash system increases yields, shortens mashing work and leads to a lower iodine index. The dynamic mixing system prevents the accumulation of grist and reduces the energy requirements for mixing. Thus, the husks are protected and the lautering times are significantly shorter. The entire mashing process can be observed through the aesthetic sight glass. The BrauKon AlloySius is completely CIP compatible.

## Shorter lautering times and increased yields

### Benefits

- › Dust and lump-free mashing-in
- › Increased yields
- › Shortened mashing work, lower iodine index
- › Shorter lautering times due to the protection of husks
- › Fully automatic CIP cleaning
- › Upgradable
- › No moving parts
- › The mashing process is checked through an aesthetic sight glass





*BrauKon GentleMix*

# BrauKon GentleMix

*The flow-optimized agitator*

BrauKon GentleMix is a flow-optimized mixing system with a specific circulation flow throughout the complete volume of mash, even at low speeds. This defined flow pattern ensures a uniform temperature distribution in the mash, increased yields and protected husks.

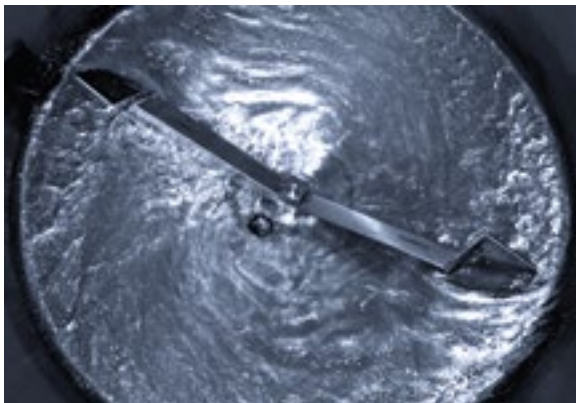
## Optimal mash while simultaneously saving energy

The BrauKon GentleMix is optimally adapted to the kettle geometry and shortens lautering times. Energy is saved and effective enzymes are achieved through gentle agitation. In addition, the transfer of heat is improved through a direct flow over the heating surfaces, and a high transverse flow ensures optimal mixing. The BrauKon GentleMix guarantees a homogeneous mash even with a very high original wort content.

## Flow-optimized, gentle agitation

### Benefits

- › Optimized flow, gentle mixing protecting the husks
- › Homogeneous temperature distribution
- › Optimal blending through high transverse flow without dead zones at the center
- › High yield and effective enzymes
- › Adaptation to kettle geometry when upgrading
- › Energy efficient and low speeds
- › Optimum heat transfer





A black and white photograph of a beer tap handle on a perforated metal surface. The tap handle is a dark, cylindrical object with a textured grip, positioned vertically. The surface it rests on is a metal plate with a grid of small circular holes. A large, bright circular highlight is cast on the metal plate directly beneath the tap handle. The background is filled with the pattern of the perforated metal and some liquid splashes.

*BrauKon SmartBoil*



# BrauKon SmartBoil

*The intelligent wort boiler*

Beer is composed of natural raw materials that vary from year to year and according to origin. BrauKon SmartBoil is a boiling system that provides brewers with maximum flexibility and economic efficiency when boiling wort.

## Best wort quality for best beer

BrauKon SmartBoil ensures a controlled flow to the heated surfaces during all phases and reduces thermal stress on the wort to a minimum. In particular, the gentle heating process improves foam stability, increases the aging stability of the finished beer and reduces coloration. Clearly an advantage when producing pale beers. With the lowest possible evaporation rates and energy use, the high efficient expulsion of DMS is a further asset. BrauKon SmartBoil delivers best, balanced beers.

## Efficient, gentle and flexible

### Maximum flexibility

Wort parameters can be adjusted according to the desired type of beer and the given raw material quality. This allows the brewer to brew strong, dark beers as well as extremely delicate pale beers. Thanks to special flow control, flexible brew sizes and even small quantities are perfectly boiled. BrauKon SmartBoil can also be seamlessly integrated into existing systems.

### Economic wort boiling

High evaporation efficiency allows for an energy saving reduction of evaporation rates to as low as 2.5 – 4 %. Via controlled circulation, burning of the wort and subsequent fouling is reduced to a minimum. Up to 30 brews can be produced without the need for cleaning, thus saving on cleaning costs and times.

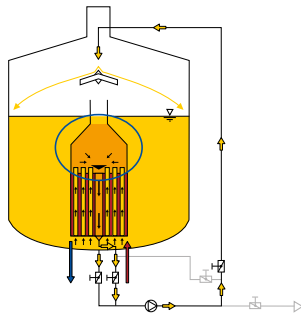
### SmartBoil Ex for low temperature heating systems

When using low-temperature heating system, the SmartBoil Ex as external boiling system is the ideal solution.

# BrauKon SmartBoil

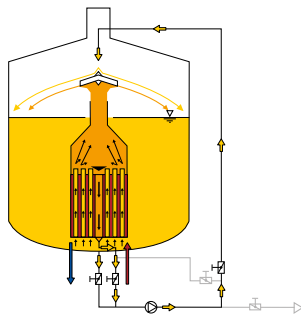
*The intelligent wort boiler*

## Procedure



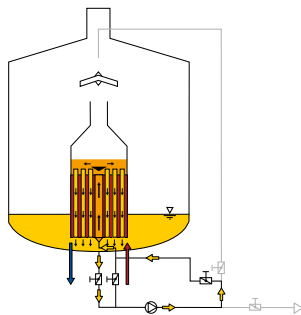
### Heating

When heating, the wort is drawn from the pipe bundle area. Colder wort from the wort kettle is forced over the heating surfaces without pulsation and is gently heated. This process minimizes fouling and improves foam quality.



### Boiling

At the start of boiling, the wort circulates with natural movement through the SmartBoil. The pipe bundle and wort supply are perfectly matched so that, even at low heating temperatures and with all brew sizes, the highest possible wort throughput is achieved. Thus guaranteeing a gentle boiling process and energy-efficient evaporation.

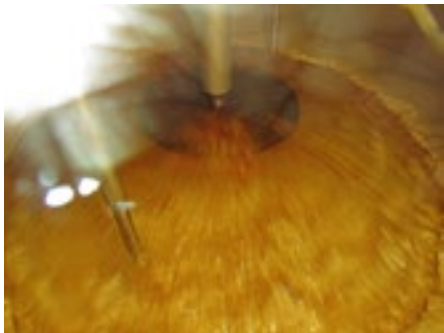
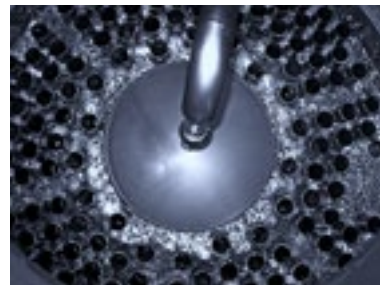


### Boiling of small batches

SmartBoil is also perfectly suited for the heating of smaller batches. The wort is pumped through the central pipe into the SmartBoil and using thin-film technology, uniformly distributed over the heating surfaces by the inlet system. The wort is then gently heated in a falling thin film.

## Benefits

- › Improved foam stability, gentle heating protects protein fractions
- › Defined flow reduces thermal stress, results in less coloration and lower TBI
- › Improved stability of finished beer
- › Minimized fouling reduces cleaning times and costs
- › Saves energy through reduced total evaporation rates as low as 2 %
- › Wort parameters can be adjusted according to the desired type of beer
- › Flexible batch sizes and very small batches possible







*BrauKon SpeedKon*

# BrauKon SpeedKon

*The efficient lautering system*

BrauKon SpeedKon guarantees perfect wort quality with maximum extract yields in the quickest of lautering times and easy automation. The robust mechanical design guarantees low maintenance costs and a long service-life.

## Maximal yields in shortest occupancy times

The interplay of special sickle blades, false-bottom geometry, source areas, and variable second-wort management guarantees fast, homogeneous mash feeds. Simultaneously, a uniform, efficient flow of spent grains is achieved thanks to an up to 25 % increase of the free area of the false bottom. That is why at least 12 brews per day are possible in a multi-vessel brewhouse. In a two-vessel brewhouse, four or more brews can be achieved per day thanks to total occupancy times of less than 120 minutes.

## Perfect wort quality in the quickest of lautering times

## Flexible grist load heights and minimum set-up times

BrauKon SpeedKon allows for a flexible grist load height: Perfect lautering is ensured not only with extremely high grist loads, but also with very low grist loads for light beers. This makes the SpeedKon an ideal tool for the brewing of craft beer. In general, SpeedKon achieves set-up times of under 10 minutes for spent grains removal and flushing the system, including filling the false bottom. This is made possible by the improved drive technology of the spent grains removal mechanism and through the efficient, water-saving flushing of the false bottom.

## Benefits

- › Maximal yield, homogeneous efficient extraction
- › Quicker lautering process, saving time when brewing
- › Shorter occupancy times, saving time when brewing
- › Flexible grist load heights
- › Shorter set-up times
- › More efficient raking machine and optimized flow by wort management
- › Lower maintenance

# We are BrauKon

*Beer with Character is our passion*

Specializing in mid-sized breweries, we deliver brewery systems of the highest quality worldwide. Our team of more than 25 master brewers and engineers build and design top-quality brewery systems that are highly flexible, economically efficient and profitable without compromising on beer quality. We guarantee the value and reliability of our systems thanks to high-quality workmanship of first class components. What drives us most, however, is our pride when your passion and our brewery systems come together and create something that is one of a kind – Beer with Character.

## Outstanding beer quality

For Beer with Character – this is the motto we work by in everything we do. Thus our systems fulfill the highest technical and design standards. Our individual, ready-to-use brewery systems guarantee brewers worldwide outstanding beer quality and optimal operational procedures.

## BrauKon products are innovative

Economically efficient, energy saving and innovative. At BrauKon we are more than one step ahead and pride ourselves on revolutionizing the brewery industry over and over again.

## Individual solutions for your beer

BrauKon is dedicated to fulfilling your needs and committed to your beer. We create custom breweries tailored to meet your individual requirements.

Take advantage of our experience and technology for your Beer with Character.







# BrauKon

*for Beer with Character*