



KIESELMANN ANLAGENBAU

Portfolio

Our Program for your Success



KIESELMANN

FLUID PROCESS GROUP



KIESELMANN ANLAGENBAU

Turning Projects into Success

"From custom-fit design and 3D-CAD-visualization to superior control and automation technology, we make every project a success. Made in Germany is our motto."

Dirk Vogler, General Manager





KIESELMANN Anlagenbau plans, manufactures and installs stainless steel systems for the food and beverage industry. Whether liquid, viscous or pasty media, whether storage or transportation, we equip you with the right stainless steel components and custom tailored plant technology.

For Strong Growth

Performance

Our scope of services entails the design and 3D planning of process plants all the way to delivery and installation. Even after implementation, we remain at your side for assistance and advice.

Quality

We plan and implement process plants with which you can produce high-quality food. To maintain consistent quality from the first to the last sip of the batch, you need the right production process, optimal piping, and an ideal production plant.

Since 1973

Experience

KIESELMANN Anlagenbau relies on an experienced team of graduate engineers, beverage technologists, food technologists, master brewers, senior fitters and technical draughtsmen to realize every project in the best possible way. We have been making your project our task since 1973.

Individuality

Many requirements are repeated in plant engineering. This is where our routine and decades of experience in breweries and food processing plants come into play. Nevertheless, no two plant construction projects are the same. Individual requirements make projects exciting and create space for custom-made solutions.



FLUID PROCESS GROUP

8 Times Stronger

KIESELMANN Anlagenbau is part of the Fluid Process Group and therefore benefits from short delivery times for the required components, cost-effective supplier conditions and an thorough exchange between the individual companies.

The **FLUID PROCESS GROUP** comprises several companies under the aegis of **KIESELMANN GmbH**. By incorporating various companies, **KIESELMANN**, formerly purely a valve manufacturer, has formed an efficient group.

This means that we can manufacture your process plant and supply the required fittings even in challenging times. Your advantage - you only have one contact person, we take care of the rest. You benefit from lean management and well-coordinated processes within the Fluid Process Group.



KIESELMANN GmbH



Guth
Ventiltechnik GmbH



RIEGER
Behälterbau GmbH



GROSS
Behälterbau GmbH



KIESELMANN
Anlagenbau GmbH



KIESELMANN
Pharmatec GmbH



VA GmbH Gesellschaft
für Food-Processing



AquaDuna
GmbH & Co. KG



WE OFFER

The Right System for your Process

As a partner to our customers, **KIESELMANN Anlagenbau** offers comprehensive overall concepts from the initial consultation through the implementation of the plant to after-sales service.

A direct contact person accompanies you throughout all project phases. Together we design and develop your customized plant.



TURN-KEY PROJECTS

Turn the Key and get Started

We design and manufacture your
complete custom plant
turnkey and ready for use

In a Single Step



Whether you need a small unit, a complete process plant or an entire production facility, we supply turn-key solutions customized to your requirements. We assemble large-scale projects and complete brewery systems directly at your location and carry out the commissioning independently.

Because of our many years of global experience in plant construction, we are your reliable partner in both the greenfield and brownfield sectors.

We think outside the box and as a general contractor, also manage the coordination with the involved companies. This enables us to integrate existing ancillary facilities and future projects right from the planning stage, thus ensuring the best possible results.

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For every cellar
the right thing

CELLAR-ENGINEERING

Perfect Fermentation and Storage

Whether fermentation cellar, storage cellar, or bright beer cellar, we equip each of your cellars with a suitable system

The Right Solution for every Cellar



Everything from a single source - we provide you with everything your cellar heart desires. We supply a ready-to-connect process plant customized for your specific cellar department. Whether you need a fermentation, storage or bright beer cellar, our KIESEL-MANN experts will find the right solution for you.

It takes a lot of time and the right equipment to mature a good beer. Perfectly designed fermentation tanks are essential to support the green beer during fermentation.

After primary fermentation, the beer is transferred to our storage tanks, which are customized and designed for your process, using optimized pipework. This is where your beer matures to ensure a special flavour experience.

For the finest and clearest beers, it is also possible to integrate a filtration system. Our bright beer cellars are optimally adapted to your production process, your variety of beers, and the requirements of the packaging department(s).

| GENERAL DATA | |
|--------------------|---|
| Performance | depending on design |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Control system | Without control system / unit control system / Process control system |
| Additional options | <ul style="list-style-type: none">> Yeast plug> Transfer system> Various sensor technologies (e.g. original gravity)> Panel oder valve matrix> Yeast harvesting> Deaeration lanterns |

ADVANTAGES

- > Optimum use of the available space
- > Manual, semi-automatic or fully automatic control
- > CIP compatible

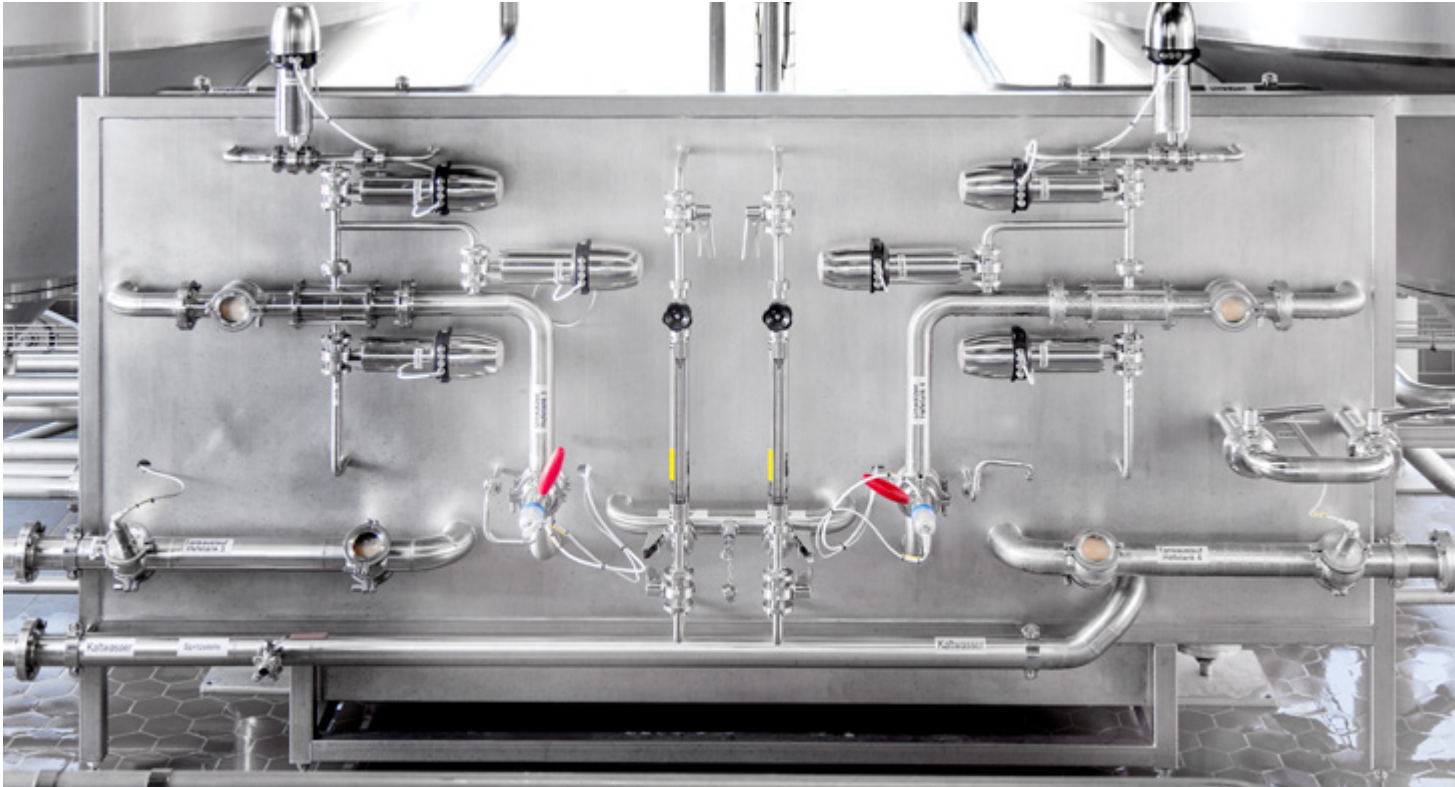


YEAST PLANTS

Yeast that has it All

Yeast management, as implemented in beer brewing, for example, includes propagation and storage in yeast plants.

Continuous Growth



Yeast propagators are used to propagate yeast and consist of closed vessels in various sizes.

The sterile wort is inoculated with yeast in the smallest propagator, for example using a Carlsberg flask. The yeast is propagated through propagators of different sizes until there is a sufficient quantity of yeast to pitch a fermentation tank.

The yeast is aerated via a permanently installed aeration fitting in a circulation loop, which ensures a gentle oxygen pick up by the yeast while simultaneously homogenizing the contents of the propagator.

Yeast storage tanks for storing harvested yeast can also be equipped with an aeration circuit. This allows them to be used flexibly as propagator or as a yeast storage tank.

A finely adjusted load cell measures the contents and records the quantity of yeast dosed.

GENERAL DATA

| | |
|--------------------|--|
| Performance | depending on design |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Control system | Semi-automatic, fully automatic |
| Additional options | <ul style="list-style-type: none">> Waste yeast management> Turbidity measurement |

ADVANTAGES

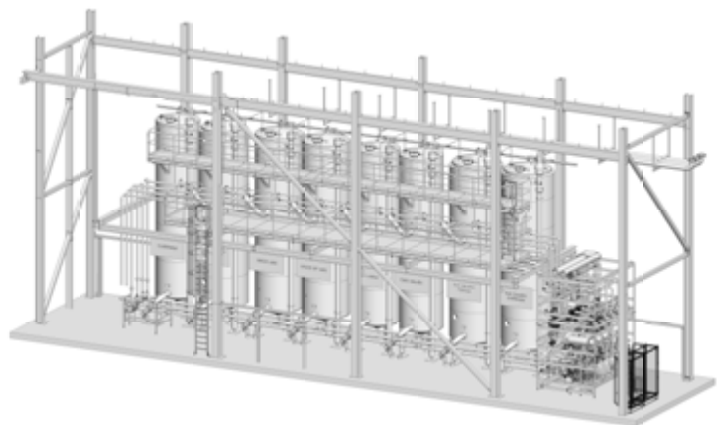
- > Fast fermentation start
- > Management of several yeast strains
- > Gentle aeration
- > Batch tracing



CIP-UNITS

Cleaning Made Easy

Automated CIP systems for cleaning
process plants in the food and beverage
industry



Residue-Free Cleaning



CIP systems can be used to clean process plants and individual plant components without having to dismantle them. Water, caustic, acid or disinfectants can be used as cleaning agents for effective cleaning. At the end of the cleaning process, sterilization ensures that any active microorganisms are destroyed.

We design and manufacture CIP systems that are optimally customized to your individual product-specific requirements.

You receive a ready-to-connect system, which we pre-assemble in parts directly in our production.

Our CIP system is equipped with a fully automatic control system, which can be easily integrated into existing control systems using bus-compatible components.

Stay flexible: integration of the CIP system into existing control systems or the addition of further CIP circuits is possible at a later date.

GENERAL DATA

| | |
|-----------------------|--|
| Performance | depending on design |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Operating temperature | Cleaning (CIP): 10 °C – 95 °C Sterilization (SIP): 80 °C – 100 °C |
| Nominal pressure | 5 bar – 6 bar (Standard) more depending on design |
| Control system | Fully automated with logging |
| Additional options | <ul style="list-style-type: none">> Several parallel cleaning circuits> Multiple CIP tanks> Multiple chemical options> CIP distribution via panel or valve matrix |

ADVANTAGES

- > Validated (replicable)
- > For hot and cold cleaning
- > Integration into existing control systems possible
- > Reduction in cleaning costs
- > Increased safety

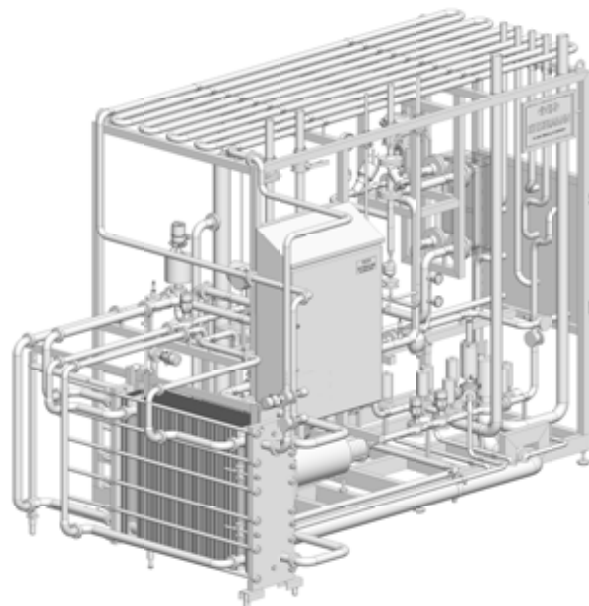


FLASH PASTEURIZER

Preserved by Heating

Flash pasteurizers

increase the shelf life of foods and beverages through pasteurization



FLASH PASTEURIZER

Precise Heating with a Flash



Flash pasteurization destroys yeast cells and inactivates microorganisms that alter or negatively affect the taste of a beverage. To avoid side effects of pasteurization on taste and color, our flash pasteurizers can be individually adjusted to the desired pasteurization units.

KIESELMANN flash pasteurizers are supplied complete with process control, mounted on stainless steel frames ready for connection. Depending on requirements, the control system is semi-automatic or fully automatic with process visualization. Integration into existing control systems is possible at any time thanks to bus-compatible components.

The thermal treatment of food and beverages serves to preserve them and ensure consumer safety. This makes hygienic processes and intelligent technology essential. Microbiologically sensitive products require careful handling.

GENERAL DATA

| | |
|---------------------|-----------------------------------|
| Products | Beer, juice, syrup |
| Performance | 10 hl/h - 600 hl/h |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Heating temperature | 68 °C - 120 °C |
| Nominal pressure | 10 bar - 24 bar |
| Control system | Semi-automatic, fully automatic |
| Heat recovery | 92 % - 96 % (Beer) |
| Additional options | > Buffer tank |

ADVANTAGES

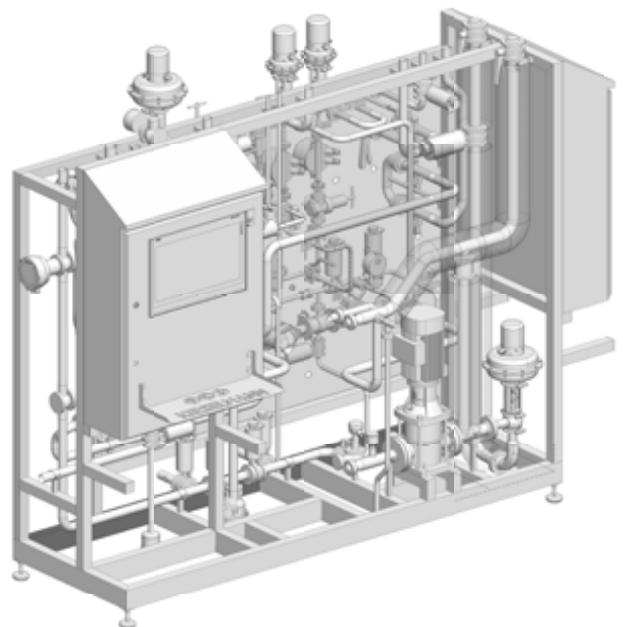
- > Including process control
- > Control via pasteurization units



WATER DEAERATION

Water without Oxygen

In order not to increase the oxygen content of the finished product, oxygen is extracted from water using a water deaeration system



Precision Deaeration



The brewing water is fed into the top of the deaeration column through a nozzle for fine distribution. It flows through a special packing material that increases the surface area and ensures a long contact time.

CO₂ is introduced from the bottom. Oxygen is removed in a countercurrent process. The oxygen/air mixture escapes upwards and is discharged to the exterior. After a short cycle, deaerated water with the desired residual oxygen content is available for production within a few minutes from standby.

If the deaerated water is intended for blending purposes, it is advisable to carbonate the water to approx. 3 g/l. This is done with a Venturi nozzle. The deaerated and carbonated water is then fed into a storage tank.

GENERAL DATA

| | |
|--------------------|--|
| Performance | approx. 20 hl/h - 1000 hl/h |
| Material | AISI 316L (V4A) |
| Control system | Manual / Touch-Panel / Process control system |
| Oxygen content | 5 ppb - 25 ppb |
| Additional options | <ul style="list-style-type: none">> UV sterilization> Vacuum deaeration> Sterile filter |

ADVANTAGES

- > Flexible plant / short start-up time
- > Precisely defined and continuous process
- > Microbiological safety through UV sterilization / sterile filter
- > Optimum oxygen concentration
- > Low CO₂ consumption / nitrogen operation possible



CARBONATION

CO₂ for Sparkling Moments

Carbonation plants are used for the production of carbonated beverages

Gentle Carbonation



To ensure consistent product quality, our carbonation plant allows the CO₂ content to be adjusted before packaging.

The CO₂ gas is dosed into the product flow and the gas bubbles are finely distributed using the Venturi nozzle, resulting in a homogeneous solution in the product.

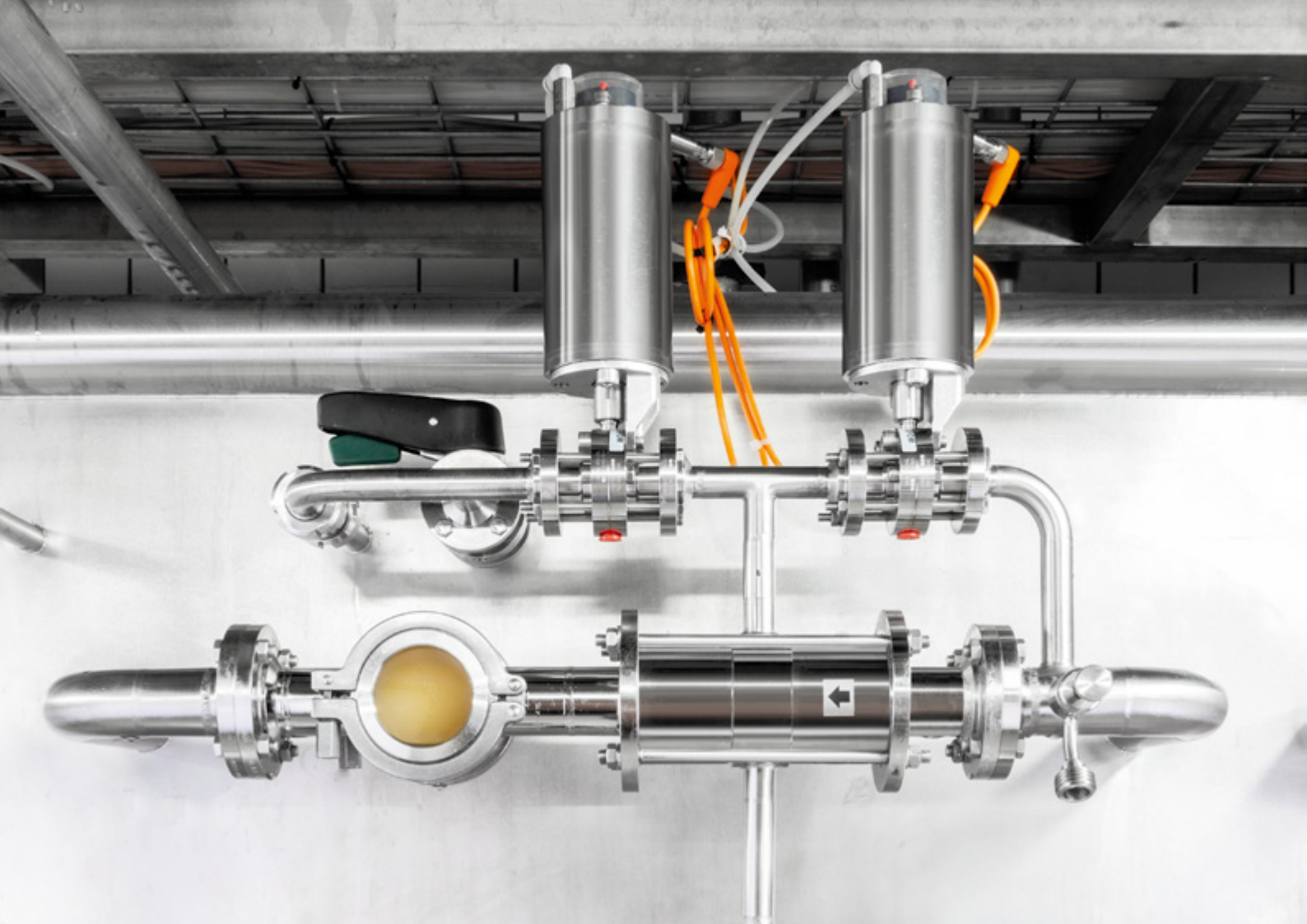
Our carbonation system is available as a manifold or panel and consists of a Venturi nozzle, a control valve, an optional CO₂ flow meter, a CIP bypass valve, and an integrated dissolving section.

GENERAL DATA

| | |
|-----------------------|---|
| Performance | 10 hl/h - 600 hl/h |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Operating temperature | Cleaning (CIP): 85 °C 1 h Sterilization (SIP): 120 °C 30 min |
| Control system | Manual or automatic |
| Additional options | > CO ₂ measurement > Blending |

ADVANTAGES

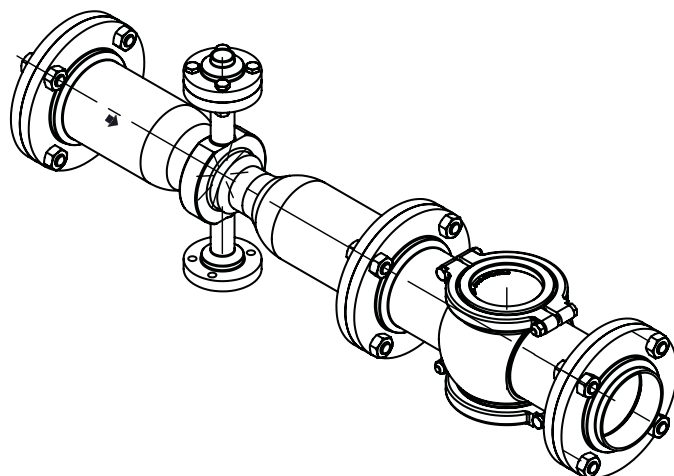
- > Fine distribution of CO₂ bubbles
- > Completely CIP-capable
- > Without dead spaces



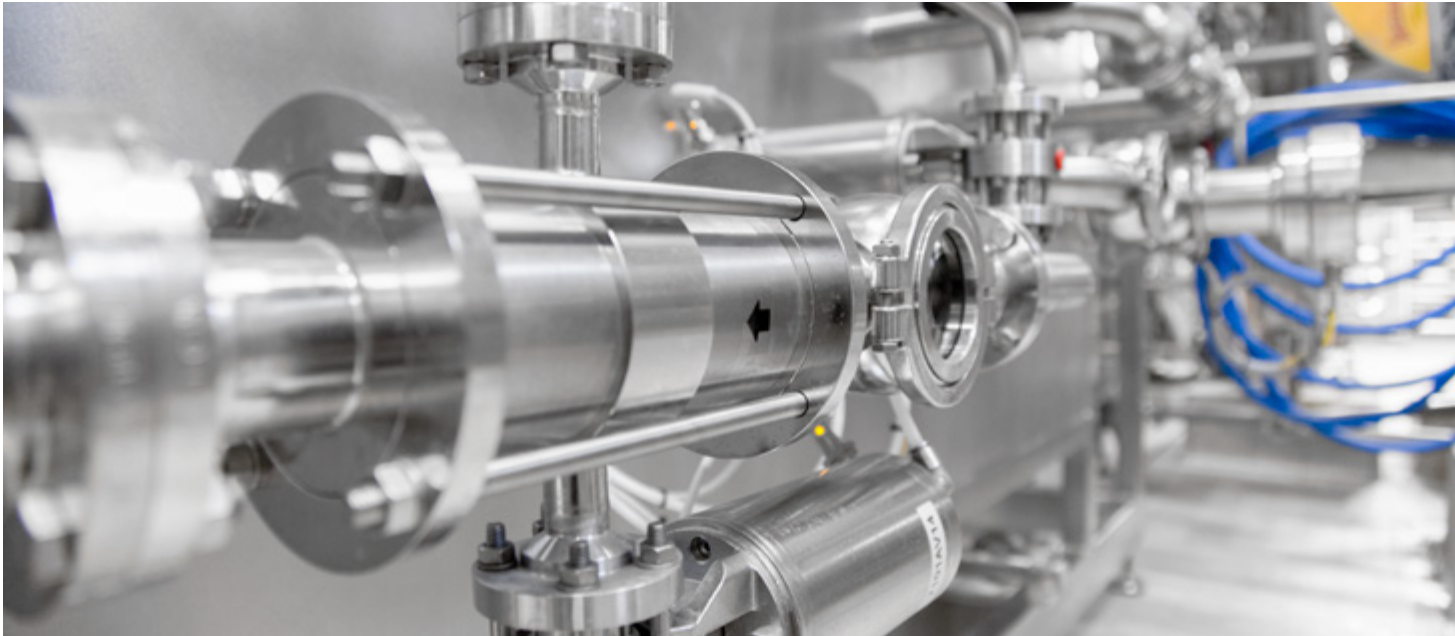
WORT AERATION

For the Best Wort Aeration

Wort aeration plants continuously dose sterile oxygen or sterile air into the beer wort



Airing until the Last Air Blast



The KIESELMANN wort aeration plant continuously doses sterile air/oxygen into the beer wort, which contributes to vigorous yeast growth and thus to as many vital, fermenting yeast cells as possible. It is designed to the highest hygienic standards and ensures optimum aeration of the cold wort.

Sterile oxygen or sterile air in the form of small bubbles is fed into the wort via a CIP-capable aeration fitting. The wort line between the wort cooler and fermentation tank serves as a solution line.

For the best possible cleaning, the KIESELMANN plant can be steamed throughout and the aeration fitting is completely CIP-capable.

GENERAL DATA

| | |
|--------------------|--|
| Performance | 10 hl/h - 1000 hl/h wort output |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Control system | Manual / Semi-Automatic / Fully automatic |
| Additional options | <ul style="list-style-type: none">> Sterile air filter> Pressure regulator> Wort flow meter> O₂ measurement> Foam trap |

ADVANTAGES

- > Continuous and precise aeration
- > Suitable for CIP
- > Integration into an existing process control system
- > Steam-sterilizable



PIPEWORK PROJECTS

Perfectly Connected

50, 200 or 1000 meters, we offer
pipe routes, pipe bridges and
individual piping of all kinds

Intelligent Piping



We plan, manufacture and install your desired piping project: whether pipe routes, pipe bridges or custom piping systems. Thanks to our experience from numerous national and international projects, we can find the right solution for every requirement.

Our piping systems are used in a wide variety of food sectors and are planned and designed to customer specifications.

We supply DIN EN 10357 and DIN EN ISO 1127 stainless steel pipes in a wide variety of specifications. You can rely on short delivery times from our warehouse in Knittlingen, Germany. We have 200,000 meters of beverage line pipe in stock for you. All stainless steel pipes are available with WAZ 3.1 according to EN 10204. We also offer you the corresponding pipe insulation.

For an immediate start and smooth project flow, we can dispatch a pre-stocked and mobile warehouse on commission to your site on request.

GENERAL DATA

| | |
|--------------------------------------|---|
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Nominal sizes | DN 10 to DN 300, more on request |
| Surfaces in contact with the product | Average roughness value: $R_a \leq 0.8 \mu\text{m}$ Weld seam area: $R_a \leq 1.6 \mu\text{m}$ |
| Outer surface | Picled or sanded, grain 400 Longitudinal seam welded, calibrated, with re-rolled smooth weld seam |
| Nominal pressure | Depending on nominal diameter and Temperature range up to max. 355 bar (5150 psi) |
| Standard length | 6 meters |

ADVANTAGES

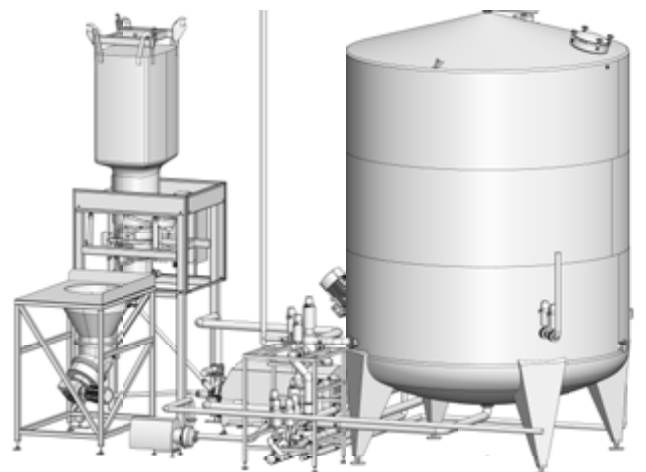
- > Cost-optimized solutions
- > Product-specific adapted piping
- > Optimum use of the available space
- > Short delivery times
- > Partial pre-assembly



SYRUP BLENDING

Dosing to the Last Drop

The dosing of individual components in a batch process is used to produce syrup



As Sweet as Syrup



Syrup is often required for the production of soft drinks.

Our product-specific syrup mixer, consisting of a basic ingredients station, small quantities station, and sugar station, all of which is dosed into preparation containers via the dosing station, lets you achieve a perfectly mixed syrup.

The design is individually customized to your requirements and is designed according to your recipes and ingredients.

The module is equipped with state-of-the-art automation and technology. Recipes can be easily managed using our recipe management tool. Our syrup blending system is fully CIP-capable.

GENERAL DATA

| | |
|--------------------|-------------------------------------|
| Performance | Up to 30,000 l/h per dosing station |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Control system | Semi-automatic, fully automatic |
| Additional options | > Sugar dissolving plant |

ADVANTAGES

- > Volumetric dosing in a constantly filled closed piping system
- > Designed according individual requirements
- > Completely CIP-capable
- > Flexibly expandability

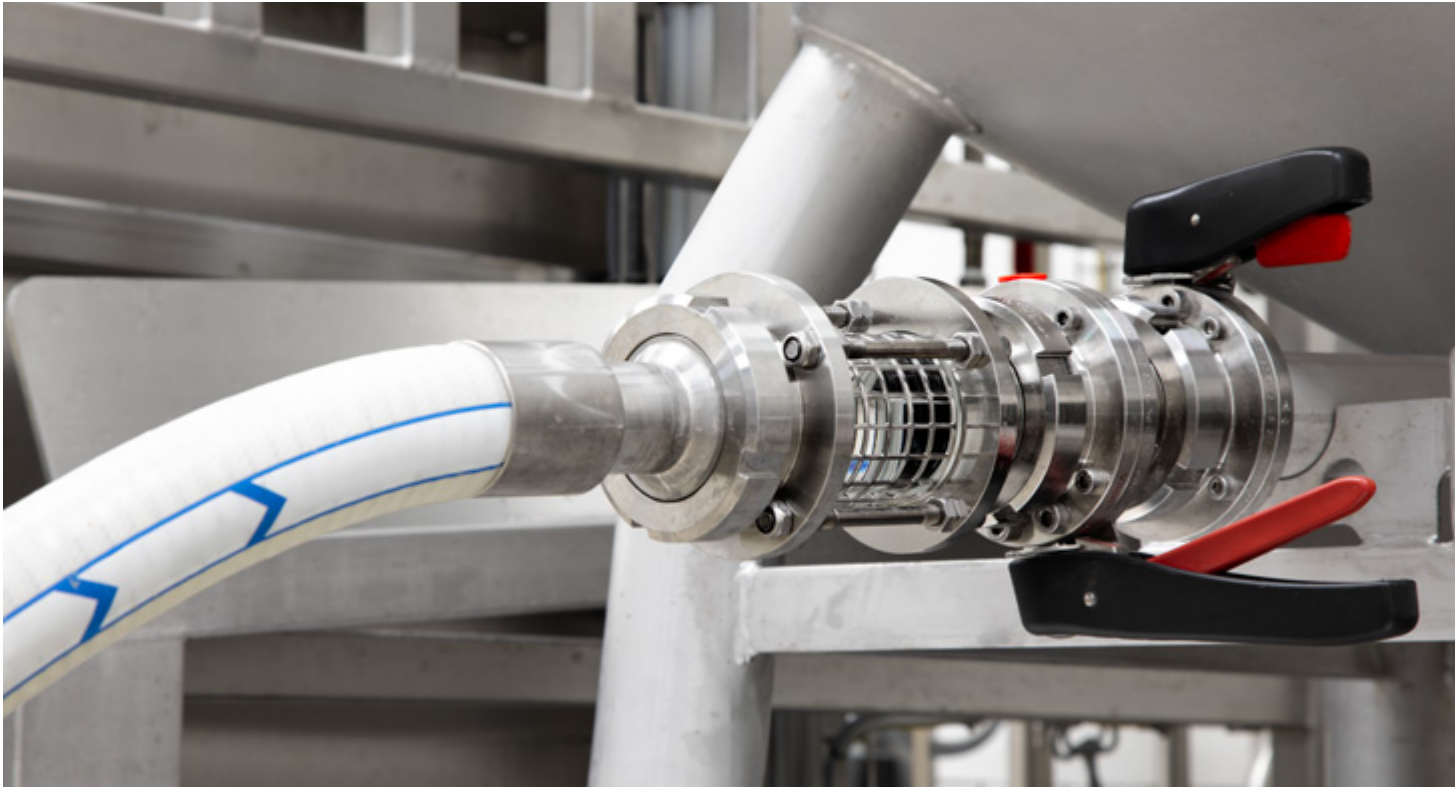


BEVERAGE MIXER

Mixing to the Fullest

The beverage mixer, makes it possible to continuously dose and mix still or carbonated drinks

Exact Mixing Ratios



The KIESELMANN beverage blending system is characterized by the precise dosing of individual beverage ingredients. We design your blending unit according to your individual product requirements.

Our fully automatic beverage blending system is available as an inline or batch process.

The batch process, which is used for smaller production outputs, requires all beverage components to be mixed in a premix. For precise mixing, we offer Vesselmix and agitators that are installed directly in the pressure tank.

In contrast, with the inline process, individual components are dosed simultaneously into a pipeline in proportion to the quantity. A static mixer ensures perfect mixing. A water degassing system is used before mixing in order to avoid oxidation processes.

GENERAL DATA

| | |
|--------------------|--|
| Performance | up to approx. 40,000 l/h |
| Material | AISI 304L (V2A) / AISI 316L (V4A) |
| Control system | Fully automatic |
| Additional options | <ul style="list-style-type: none">> Vesselmix> Agitator> Water deaeration plant |

ADVANTAGES

- > Modular design
- > Volumetric dosing with efficient mixing process
- > Completely CIP-capable
- > Integration into existing control systems possible
- > Available as an inline or batch process



PIGGING TECHNOLOGY

Effective Savings

Our pigging technology makes it possible to clean and completely empty out pipelines



On your Marks, Pressure, Go



The KIESELMANN pigging technology is used for efficient product recovery and achieves a considerable cleaning effect with pasty products.

The pig, which is made of FDA-compliant silicone, is driven by a propellant and pushes the entire product out of the pipeline.

The KIESELMANN pig is available in sizes DN40 - DN100. The pig is a perfect fit for beverage pipes in accordance with DIN EN 10357. The position of our pig can be monitored in all parts of the system using sensors.

Designed with a Janus head, the KIESELMANN pig can be operated mono-directionally (in one-way operation) or bi-directionally (in shuttle operation). In bi-directional operation, it is a closed system, which is why the pig does not need to be removed, thus increasing safety many times over.

In addition to sending and receiving stations, we offer intermediate stations for targeted emptying of lines. We continue to meet your requirements - with our piggable double-seat valves and flushable ball valves, your pigging system is ideally equipped.

GENERAL DATA

| | |
|---------------------------|---|
| Pig sizes | DN40 – DN100 |
| Material plant components | AISI 304L (V2A) / AISI 316L (V4A) |
| Material pig | Silicone |
| Resistance temperature | -10 °C – 140 °C |
| Pig speed | 1 m/s |
| Pressure loss calculation | Customized according to design |
| Control system | Manual or fully automatic |
| Additional options | > Intermediate stations > Piggable manifolds |

ADVANTAGES

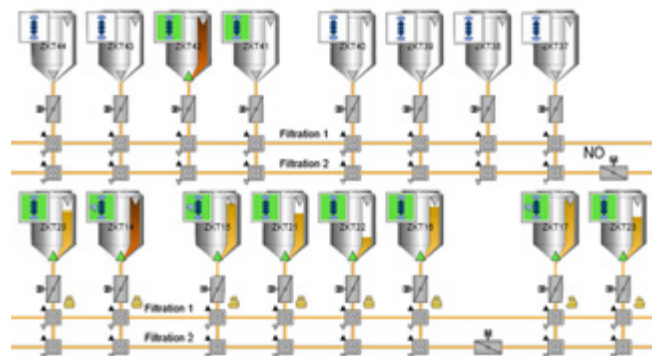
- > Sensors for pig detection
- > Closed transmitter and receiver station
- > Cleaning-optimized flow control
- > Short-term return on investments



PROCESS AUTOMATION

Automation with Perspective

Automation for process plants
in the food & beverage industry



Control with Brains



We offer you the process automation to match your plant. You receive an all-round service from planning to acceptance, we are at your side in every situation.

We automate your process plant individually and product-specifically and integrate our process systems into existing process structures. Thanks to our many years of experience with a wide variety of projects, we have the technical know-how to perfectly automate your plant.

Power & head: With us, you have a specialist in KI-TOP control heads at your side. Our control heads can be connected to the control system via various systems, such as PLC, ASI bus or IO-Link.

GENERAL DATA

| | |
|--------------|--|
| HMI | Proleit brewmaxx, Siemens BRAUMAT, Siemens WinCC |
| PLC hardware | Siemens (others on request) |
| Service | Control system design, EPLAN circuit diagrams, ready-to-connect control cabinets, programming, visualization, commissioning and acceptance |




Success Stories in Pictures

Review your dream project. Keep your project in memory with our individually created photo book.

Take a look inside:

Get an insight into selected projects.

[Click here](#) 

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