

# BERTSCHfoodtec

Technology for the  
food industry

97  
YEARS

TRADITION  
QUALITY  
KNOW-HOW  
SINCE 1925

Demand-oriented plant construction for  
the premium quality in the dairy industry


Internationally proven process technology



**BERTSCH**

TRADITION, QUALITY, KNOW-HOW. SINCE 1925





» High potential for innovation

## » BERTSCHfoodtec – a competent partner for the modern dairy industry«

BERTSCHfoodtec is your competent partner in the dairy industry. Careful handling of the natural milk product, the highest technical standards, and first-class quality characterize the dairy and cheese plants.

Through specialization, investments and pioneering spirit over generations, this family business in Vorarlberg has developed into an internationally recognized partner for the dairy and cheese industry. As a full-range supplier, the specialists from BERTSCHfoodtec accompany their customers from the initial consultation, through the design and planning, to the installation and commissioning of tailor-made systems. This can be either the integration of individual components into a production line or a turnkey production solution. Many years of know-how, high-quality components and state-of-the-art process technology guarantee optimum product results and uncompromising quality.

### » BERTSCHfoodtec | Range of services

- » BERTSCH universal cheese vat
- » Cheese plants and cheese storage
- » Loading and unloading station for salt-bath racks
- » Cheese plants for small production facilities
- » Dairy plants
- » CIP cleaning equipment
- » Installation and service



»The art of perfect cheesemaking –  
BERTSCH universal cheese vats«

»Universally applicable for many different  
cheese types«

Cheesemaking is a complex process that requires not only first-class raw materials, but also perfect workmanship. That's why many experienced cheesemakers have been relying on the proven technology and reliability of the universal BERTSCH cheese vat for decades. Its excellent stirring and cutting results and optimised process technology make it a top product and an important component in the production of first-class cheese.

The BERTSCH universal cheese vat is a real all-rounder for the production of a wide variety of cheeses. Whether hard or semi-hard cheese, its tested and proven design and technology always ensure the best results.

- » High-quality and reliable components

» Tried-and-tested design

» Entire construction made entirely of stainless steel (except gearbox)

» Gear chamber and whey suction drive are hermetically separated from the product area

» Double-O shape with large surface area, resulting in low breakage of kernels

» Heating with hot water and steam possible
- » Fast and efficient emptying

» Double cone with two outlets, fast, gentle, complete emptying

» Whey suction with a generously dimensioned pneumatically operated basket or: Valves in the vat wall

» Highest hygiene standard

» Control concept adapted to customer's specifications
- » Excellent stirring and cutting results

» Self-supporting agitators without bottom bearing

» Electropolished cutting and stirring unit made from special knife steel

» Optimised paddles for uniform vat flow
- » Optimised process technology

» Recipe control for automatic process flow

» Remote monitoring with Ethernet

» Jelly measurement/automatic determination of the cutting time (optional)



» Suitable for different filling volumes											
Type	DK200GN	DK400GN	DK600GN	DK800GN	DK1000GN	DK1200GN	DK1500GN	DK2000GN	DK2500GN	DK3000GN	DK3500GN
Contents (l)	2,000	4,000	6,000	8,000	10,000	12,000	15,000	20,000	25,000	30,000	35,000
Length (mm)	2,256	2,670	2,880	3,260	3,820	3,820	4,445	4,950	5,320	5,320	5,320
Width (mm)	1,646	2,020	2,180	2,430	2,880	2,880	3,370	3,750	4,020	4,020	4,020
Height (mm)	2,950	2,750	2,950	3,045	3,340	3,500	3,650	3,760	3,900	4,200	4,500





» High potential for innovation

## »The secret to the perfect cheese curd – the **BERTSCH cutting and stirring system**«

Uniform curd with minimal dust content is required for the highest cheese quality. The cutting and stirring technology in the BERTSCH cheese vat is the result of intensive development work, which focused on producing the perfect pieces of curd.

BERTSCH cutting and stirring tools are made of special stainless steel with an entirely electropolished finish. The flat stirring blades are designed to offer optimal fluid dynamics to suit the type of cheese in production. For quick and complete emptying, the BERTSCH cheese vat is equipped with two generously dimensioned outlet valves in a double cone. If you would like to automate the process of creating cheese curd, an optional special probe is also available.

» BERTSCHfoodtec – cutting mechanism and stirrer

- » Self-supporting cutting mechanism and stirrer without ground storage
- » Fully electropolished stirrer design
- » Pneumatically operated whey suction or side wall valves
- » Double-cone bottom with two outlets



# »Worldwide tried-and-tested cheese processing plants«

To ensure that every cheese line or complete cheesery exactly meets the needs and market requirements, each machine is tailored to measure. This provides the basis for the production of high quality products. Experienced cheese masters rely on the all-round service of BERTSCHfoodtec for plant and process planning, design of lines or entire plants, and also automation solutions. Our range of services also includes training, preliminary and feasibility studies.

- » Milk reception and treatment
  - » Milk reception, degassing, quantity recording
  - » Heating, cooling, filtration, standardisation
  - » Hygienic valve and piping system
  - » Processing and storage tanks

- » Products
  - » Hard/semi-hard cheese varieties
  - » Mozzarella and soft cheese
  - » Cream cheese, cottage cheese
  - » Special products made from sheep and goat milk

- » Production lines
  - » Cheese vats, stainless-steel/copper finish
  - » Filling and pressing systems
  - » Salt-bath/whey-treatment systems

- » Innovative engineering
  - » Plant design with modern CAD systems
  - » Individual control concepts
  - » Technological support
  - » Sophisticated solutions



# »Ensure competitive advantages with demand-oriented cheese press systems«

In order to achieve the highest quality and thus market and competitive advantages, tailor-made press systems are of crucial importance. Whether large or small businesses, BERTSCHfoodtec has the ideal solution. We can offer press systems in different automation levels, from manually operated cheese presses to automatic press systems. The concepts are characterized by efficiency, cost-effectiveness and careful product treatment.

- » BERTSCHfoodtec offers needs-based solutions for the following areas
  - » Pressing systems with automatic support for the cheese blocks
  - » Multipresses for manual removal of the cheese
  - » Pressing systems for direct filling into moulds or for curd mat pressing
  - » Pressing systems for alpine cheese, Gruyère, Emmental, and other hard and semi-hard cheeses

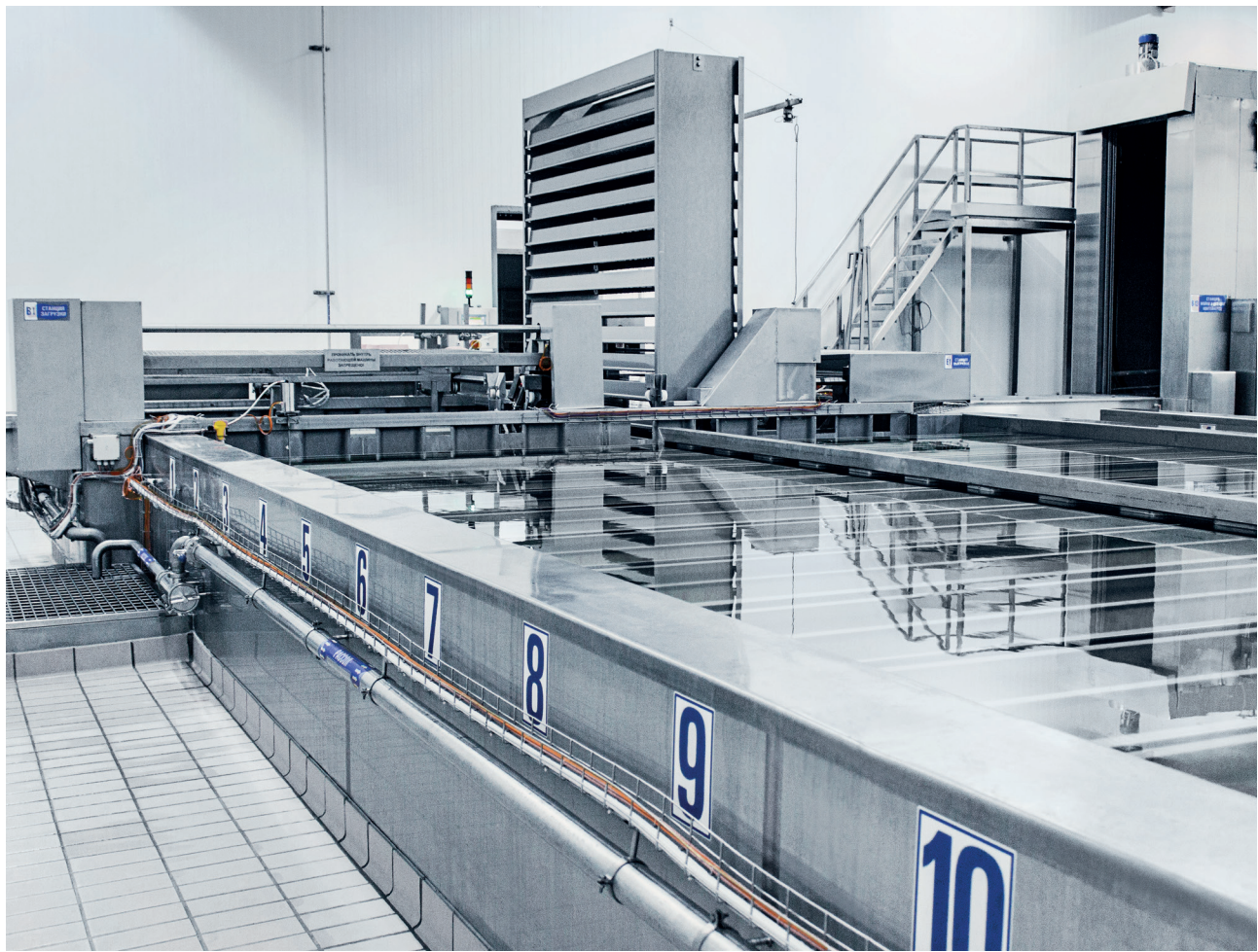




# »More benefits through fully automatic loading and unloading of salt bath racks«

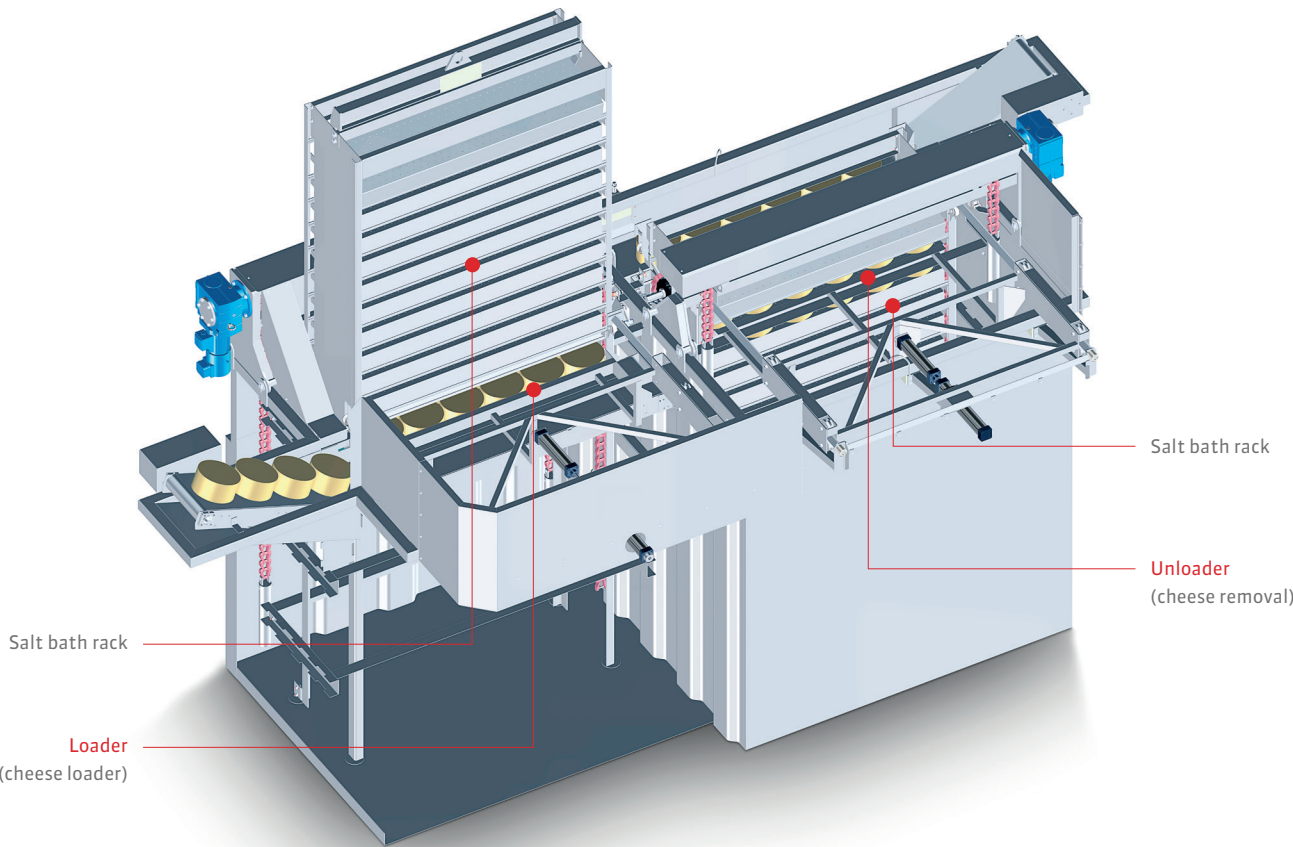
In order to ensure an optimal process with minimum space requirements, we plan our salt bath loading and unloading stations precisely to the spatial and technical conditions of our customers. The cheeses are dispensed from the cheese press directly onto a conveyor belt and transported to the salt bath rack loading station. Optionally, scales or cheese labelling equipment can be positioned in the feeder line.

» Sturdy design	» Consistent quality
» Stainless steel construction AISI 316L	» Even, gentle treatment of the cheese
» Components of the highest quality	» Automatic control system
» Simple system design, low maintenance	» Remote maintenance
» Full performance at all times	» Low personnel costs



# »Increased efficiency as a result of intelligent technology«

After the cheese press, the fresh cheese blocks are transported directly to the salt bath via the conveyor belt. The conveyor belt dips gently into the brine and the special insertion device pushes the cheese into the salt bath rack. Once a level is filled, the rack is lowered by another level in the salt bath. A crane system then places the filled racks in their place in the salt bath. Unloading takes place according to the same principle. All components in contact with brine are made of corrosion-resistant AISI 316L stainless steel. The rails of the crane system are also optionally available in stainless steel.



» BERTSCHfoodtec – further equipment for the salt-bath sector	
» Salt bath in stainless steel	» Brine buffer tank
» Salt-dissolution station	» Filtration system for brine purification
» Brine cooling	» Range of salt bath racks



## »The complete provider for small-scale productions«

Successful production facilities rely on top quality products, because this is the only way to prevail in the market. This is why our customers rely on process solutions from BERTSCHfoodtec. BERTSCHfoodtec develops production concepts individually and precisely tailored to customer needs. Sophisticated processing technology combined with expertise and know-how provide our customers with decisive advantages for the manufacturing of quality products.

### » Range of services

- » Consultation and concept development
- » Process, procedure and layout planning
- » State-of-the-art components
- » Needs-based automation solutions
- » Installation and commissioning by specialists
- » Emergency number, service and spare parts service
- » Optional remote maintenance via Ethernet

### » Process solutions for

- » Hard and semi-hard cheese
- » Milk and milkshakes
- » Quark, yoghurt and soured milk
- » Mozzarella, cream and butter
- » Other special products



## »Solutions tailored to premium products«

As a supplier of complete systems and production lines, our product range includes all the components needed to develop customer-specific solutions. For small-scale production, this is precisely one of the decisive criteria for cost-effective production.





# »Dairy plants perfectly tailored to your needs«

BERTSCHfoodtec designs, plans and manufactures dairy solutions tailored to your operational and economic needs – from individual production lines right through to entire facilities. This allows us to ensure maximum efficiency for our customers whilst also ensuring the greatest possible levels of profitability. All for the highest quality and tastiest dairy products.

<p>» Process solutions</p> <p>» Milk reception, degasification, quantification</p> <p>» Pasteurisation, heating, cooling</p> <p>» Separation, cleaning, homogenisation</p> <p>» Filtration applications (UO/NF/UF/MF)</p> <p>» Automatic standardisation systems for milk</p> <p>» Hygienic valve and piping systems</p> <p>» Storage and processing tanks</p> <p>» Mixing systems</p>	<p>» Products</p> <p>» Milk/ESL/UHT</p> <p>» Milkshakes</p> <p>» Yoghurt, yoghurt drinks</p> <p>» Cream</p> <p>» Butter</p> <p>» Quark</p> <p>» Dessert products</p> <p>» Soured milk</p>
<p>» Automation</p> <p>» Tailor-made control systems</p> <p>» Clear, straightforward visualisation</p> <p>» Detailed logging of process steps</p> <p>» Integration into existing control systems</p> <p>» Remote maintenance via Ethernet</p>	<p>» Profitability</p> <p>» State-of-the-art plant technology</p> <p>» Gentle product treatment</p> <p>» Needs-based plant concepts</p> <p>» Energy-efficient, reliable and durable</p>



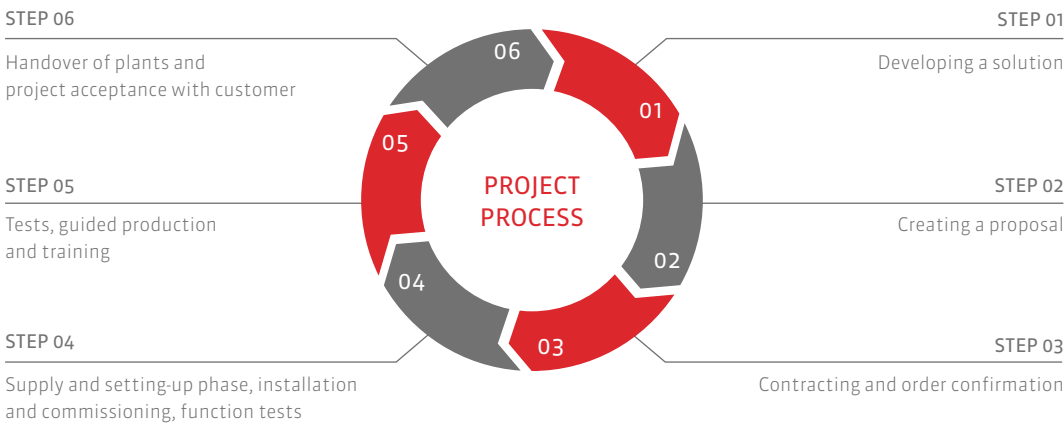
# »Gain a decisive competitive advantage with BERTSCHfoodtec«

Only modern, process-optimized and, above all, tailor-made systems can show their full potential in the production of high-quality dairy products. We give you decisive competitive advantages for gentle and economical product treatment and production through a solution designed specifically for your requirements. Our competent and experienced service staff also guarantee maximum availability of your system.



## » From the first basic concept to completion – 6 steps to your dairy

A competent design is the basis for successfully bringing a project to life. With years of experience and detailed knowledge of the dairy industry, we are well-placed to assist our customers at every phase of the project until the plant is ready to go.





# »Hygiene that creates trust – CIP cleaning systems«

Modern production facilities with their complex piping systems place the highest demands on CIP cleaning. We design and build tailored cleaning systems in all areas of application, which can save cost, energy and time. No matter whether you are planning a basic, complex or fully automatic cleaning system for your production facility, BERTSCHfoodtec always has the perfect systems to suit your needs featuring state-of-the-art technology.

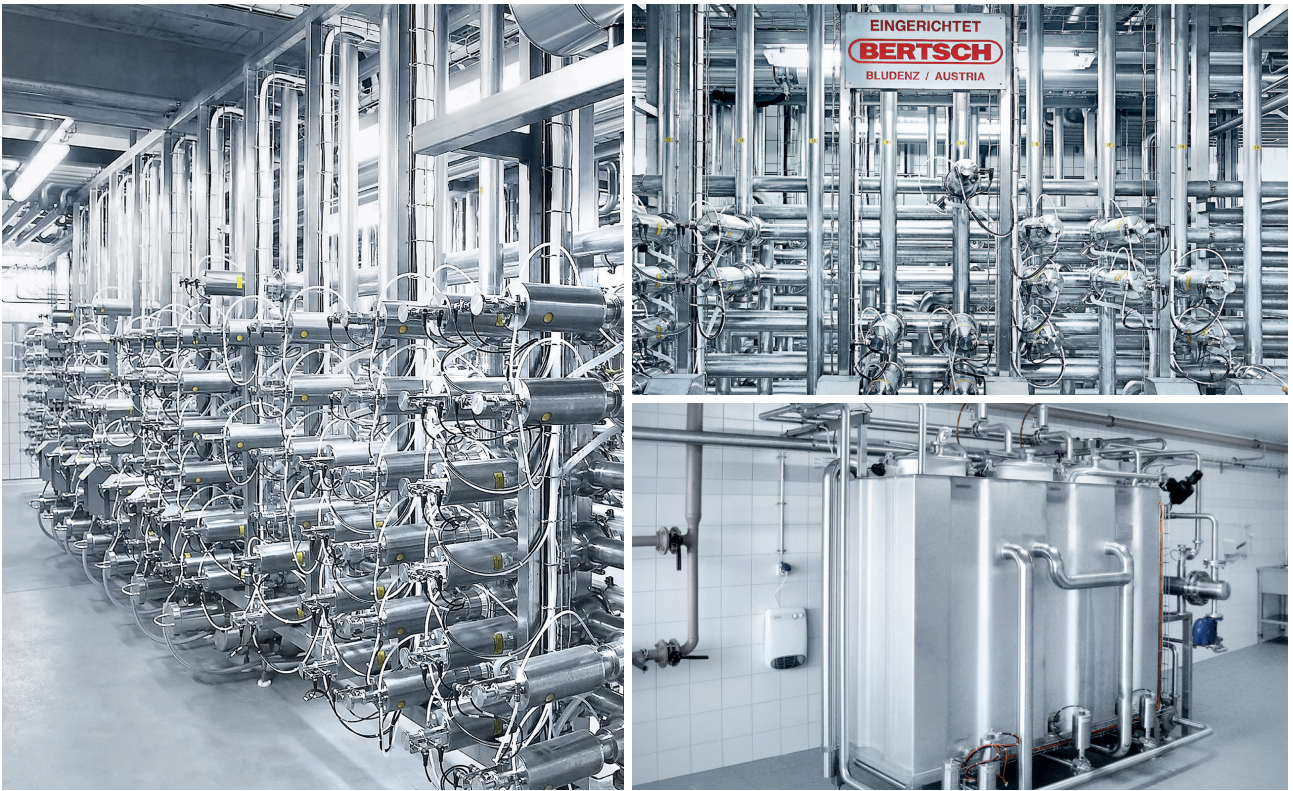
» High-quality components	» Customised automation
» Stainless-steel construction	» Freely programmable Siemens PLC control
» High-quality components	» Clear and simple visualisation
» Proven valve technology for the highest level of safety	» General overview of the process flow
» Automatic re-processing of the cleaning agents	» Constant control of the cleaning parameters
» Heating of the cleaning solution by means of tubular heat exchangers	» Monitoring of CIP supply and return
» Tank designed to suit requirements, cylindrical or cubic	» Logging and traceability
» State-of-the-art measurement and control technology	» Optional remote maintenance via Ethernet
» Worldwide tried-and-tested systems	» Potential for integration into existing control systems



# »Proper cleaning for every system and situation«

A BERTSCHfoodtec cleaning system is always designed specifically for your process line. The cleaning principle is identical for all systems and is based on circulating water or cleaning fluid. The system is controlled by a programmable PLC unit. It monitors all cleaning parameters with state-of-the-art measuring technology.

Any deviations are therefore immediately recognisable and controllable. The cleaning solutions are heated by tubular heat exchangers before being introduced into the cleaning cycle. Once used, they are collected and prepared once again in the same way as the water from the last system rinse. This serves as pre-rinsing water for the next cleaning process. The option is also available to sterilise cleaned systems further using disinfectant.



## CONTROL AND AUTOMATION

Every system is only ever as good as the quality of its individual components. This is why BERTSCHfoodtec as a full-service provider offers a comprehensive range of services: from planning and software right through to installation and an aftersales service for complete control systems with S7, WinCC or PCS 7 process control systems. Always tailored to the individual needs and requirements of our customers. This ensures maximum cleaning performance with maximum efficiency and availability.



»Assembly and our service ensure the highest system availability«

Good service shows its value when it is called upon. At BERTSCHfoodtec, we do everything to achieve optimal operation and availability of your plants. The BERTSCHfoodtec service is thus an important investment for your productivity, because it protects against failures and unnecessary consequential costs. We will gladly provide you with a service offer tailored to your needs.

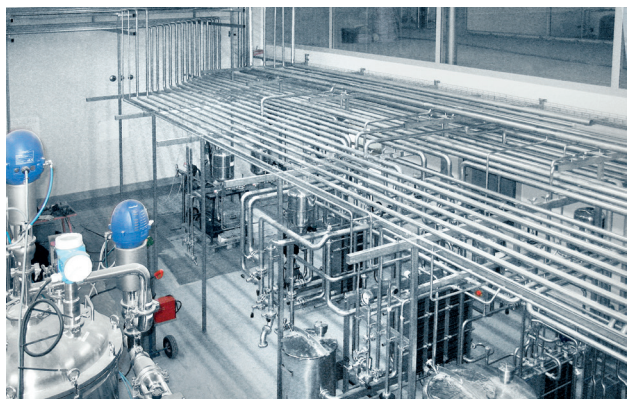
- » Installation
- » Our own experienced assembly staff

» Large pool of technicians

» Decentralised locations of installation teams

» Continuous training/further education

» Experienced staff worldwide



- » Service
- » Preventive maintenance according to schedule

» Control of all systems

» Maintenance as required by agreement

» Individually coordinated service plan

» Our service teams have extensive systems knowledge



»Our all-round service program, when it counts«

Due to their solid design, BERTSCHfoodtec systems are among the most reliable on the market. Should something happen, we will quickly be there to assist you on site at any time with our service specialists. The decentralized locations of our service teams enables short trips with fast reaction times. We also provide a quick spare parts supply worldwide. The BERTSCHfoodtec 24-hour service hotline is always available for you. Our service specialists will ensure high system availability and, in the event of a breakdown, the shortest possible downtime of the equipment.



- » BERTSCHfoodtec – your partner for assembly and service
- » International service on-site

» Prompt delivery of spare parts

» 24-hour service hotline

» Emergency service always on call

» Valve maintenance in accordance with the HACCP concept

» Testing of pasteurisation plants



# Contact

## BERTSCHgroup

Bertsch Holding GmbH  
T +43 5552 61 35-0  
Herrengasse 23  
6700 Bludenz | Austria  
bertschgroup@bertsch.at

## BERTSCHfoodtec

Bertsch Foodtec GmbH  
T +43 5552 61 35-0  
Herrengasse 23  
6700 Bludenz | Austria  
bertschfoodtec@bertsch.at

Bertsch Foodtec Production Site  
T +43 5552 61 35-0  
Klostertalerstraße 27  
6751 Braz | Austria  
bertschfoodtec@bertsch.at

Bertsch Foodtec GmbH  
+43 5552 61 35-0  
Baumgasse 68  
1030 Vienna | Austria  
bertschfoodtec@bertsch.at

## BERTSCHfoodtec Italia

Bertsch Foodtec Italia  
T +39 59 681565  
Via Chiesa Cortile, 21/A  
41012 Carpi (Modena) | Italy  
bertschfoodtec@bertsch.it

[www.bertsch.at](http://www.bertsch.at)



**BERTSCH**

TRADITION, QUALITY, KNOW-HOW. SINCE 1925