

Optimised processes in the beverage industry – with ProMinent

Reliable solutions for all areas
of production and filling

ProMinent®

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Appropriate solutions thanks to competence and experience in the industry

Pure water and total hygiene are indispensable in the beverage industry. ProMinent is a leading specialist for in-house water management, sterilisation and disinfection.

Measurement, control and dosing of liquid chemicals at all stages of the production and filling process complete our portfolio.

ProMinent supports customers worldwide with integrated solutions: from the design of an efficient plant, perfectly adapted to customer requirements, through installation and commissioning, to maintenance and service. As a supplier of all processes and components, we offer a modular system with comprehensive measurement, control and dosing equipment.

- Universal solutions for all production and filling processes – from product water treatment to wastewater treatment
- Optimal choice of technology, as ProMinent provides all current disinfection processes
- Wide-ranging concept for disinfection with chlorine dioxide from the world leader in this technology
- Low investment costs thanks to universal technology and customised design
- Turnkey systems with coordinated measurement, control and dosing equipment



For more information, visit:
www.prominent.com/beverages

A Brewhouse

B Fermentation/storage cellar

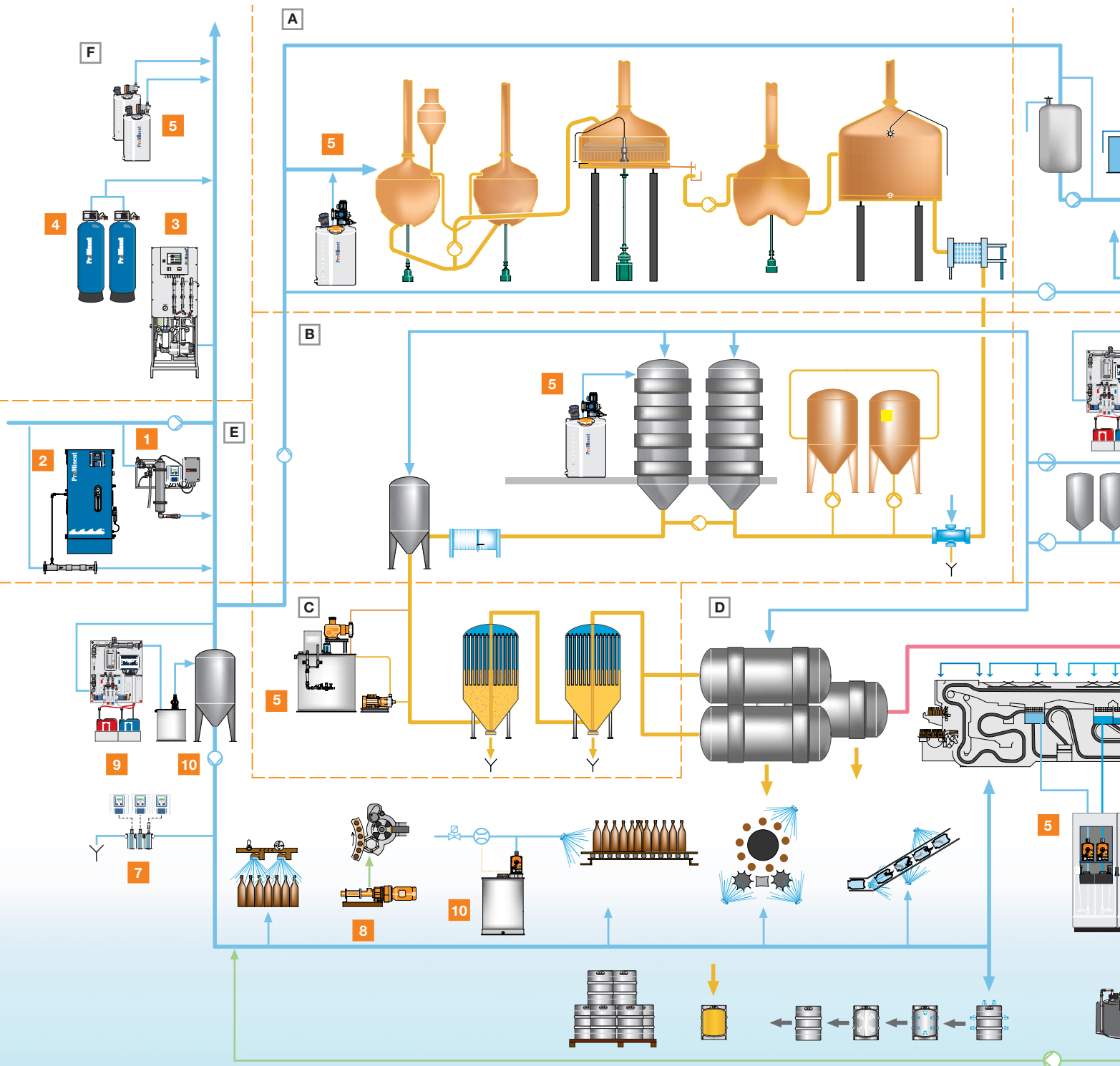
C Filtration

D Filling/packaging

E Total water treatment

F Boiler house/engine room

G Soft drinks



1 Disinfection system
Dulcodes UV

2 Ozone production plant
OZONFILT® OZVa

3 Osmosis plant
Dulcosmose® reverse

4 Water softener
DOUCEMAT®

5 Application-specific dosing
systems

6 Chemical storage
depot in accordance
with WHG (Water
Management Act)

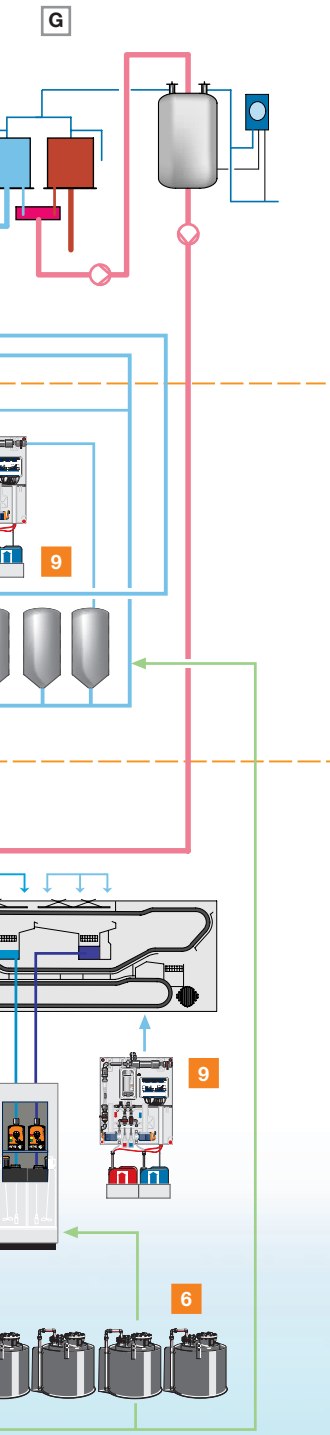
7 Measurement and
control equipment
DULCOMETER®/
DULCOTEST®

8 Transfer pumps
Spectra

9 Chlorine dioxide
generating plant
Bello Zon®

10 Proportional dosing system
gamma/ DOS

Process optimisation integrated solutions



ProMinent comprehends the processes in the beverage industry. We've been working for leading beverage manufacturers and their supply industry for years. For us, process optimisation isn't just a catchword, it's part of our daily life: from the unpacker, through bottle washer, filler, CIP and syrup room, ProMinent technologies ensure the highest level of efficiency, quality, and operational and product safety.

A Brewhouse

- Dosing of brewing gypsum, propionic acid, lactic acid, enzymes
- Dosing of bitter substances and hop oils

B Fermentation / storage cellar

- Dosing of colourant malt extract and yeast nutrients
- CIP of fermentation and storage tanks, yeast propagation

C Filtration

- Dosing of kieselgur/PVPP
- CIP of pressure tanks

D Filling / packaging

- Proportional dosing of belt lubricant
- Disinfection of the bottle conveyors
- Disinfection, inhibitor and softener dosing on the pasteuriser
- Disinfection/chemical dosing for bottle washer
- Keg cleaning/disinfection
- Disinfection in the bottle/can rinser
- Disinfection filler jetting, filler external cleaning, glass splinter safety shower
- Bottle cap disinfection
- Central adhesive dosing for labelling
- Surface disinfection of system components
- Storage and transfer of chemicals

E Total water treatment

- Disinfection/sterilisation of potable water and service water
- Cleaning/disinfection of pipes for potable and process water
- Neutralisation of wastewater

F Boiler house / engine room

- Softening/inhibitor dosing in boiler feed water treatment
- Disinfection in the cold water circuit
- Cooling tower/cooling water treatment

G Soft drinks

- Cleaning and disinfection of plant components, tanks
- Cleaning/disinfection of fruit presses
- Dosing of ingredients



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www.prominent.com/beverages

Dosing systems

ProMinent dosing systems are already standard in the beverage industry: From caustic soda to flavourings, almost anything can be dosed with ProMinent® dosing pumps. In combination with ProMinent storage vessels and tanks, the entire operation can be supplied with all necessary chemicals and auxiliary materials.



Measurement, control and sensor technology – DULCOMETER® and DULCOTEST®

The production process is made safer through perfect interaction of measurement, control and dosing equipment from one source. Sensors for pH, redox and conductivity are standard. Special sensors for chlorine dioxide, chlorine, chlorite, ozone, peracetic acid and hydrogen peroxide complete the product range.



Chlorine dioxide systems – Bello Zon®

Chlorine dioxide is the economically and ecologically viable alternative to many conventional disinfectants. Whether in the central water treatment, bottle washing, rinser, filler or CIP – chlorine dioxide plants from ProMinent produce and dose chlorine dioxide reliably and protect the entire production process.



Membrane electrolysis – Dulco®Zon

Chlorine is produced directly on site by electrolysis – from low-cost, inoffensive common salt. ProMinent® electrolysis plants represent an outstanding alternative to dosing of chlorine gas or liquid chlorine products.



The best products guarantee maximum production safety



UV systems – Dulcodes

Radiation with UV light produces microbiologically pure water – without use of chemicals. What's more, the radiation also removes any disinfectant residues present, like chlorine dioxide, ozone or chlorine, from the water to be used for product manufacture.



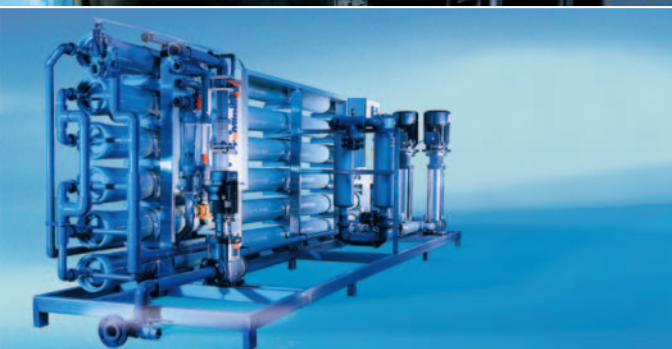
Ozone systems – OZONFILT® and Bono Zon®

Sterile water for rinsing is produced by the addition of ozone. So the glass or PET bottles rinsed with this water are microbiologically clean. ProMinent® ozone plants produce ozone from the oxygen in the air or from pure oxygen. Ozonisation is used at two stages in water treatment, for removal of iron, manganese, and other contaminants, and for disinfection of the water.



Chemical storage vessels/tanks

ProMinent storage tanks and vessels guarantee the highest reliability in storage and handling of chemicals. Precisely adapted to the dosing equipment, designed and constructed for each individual use, they store alkaline solutions, acids and other additives reliably and safely.



Reverse osmosis plants - Dulcosmose®

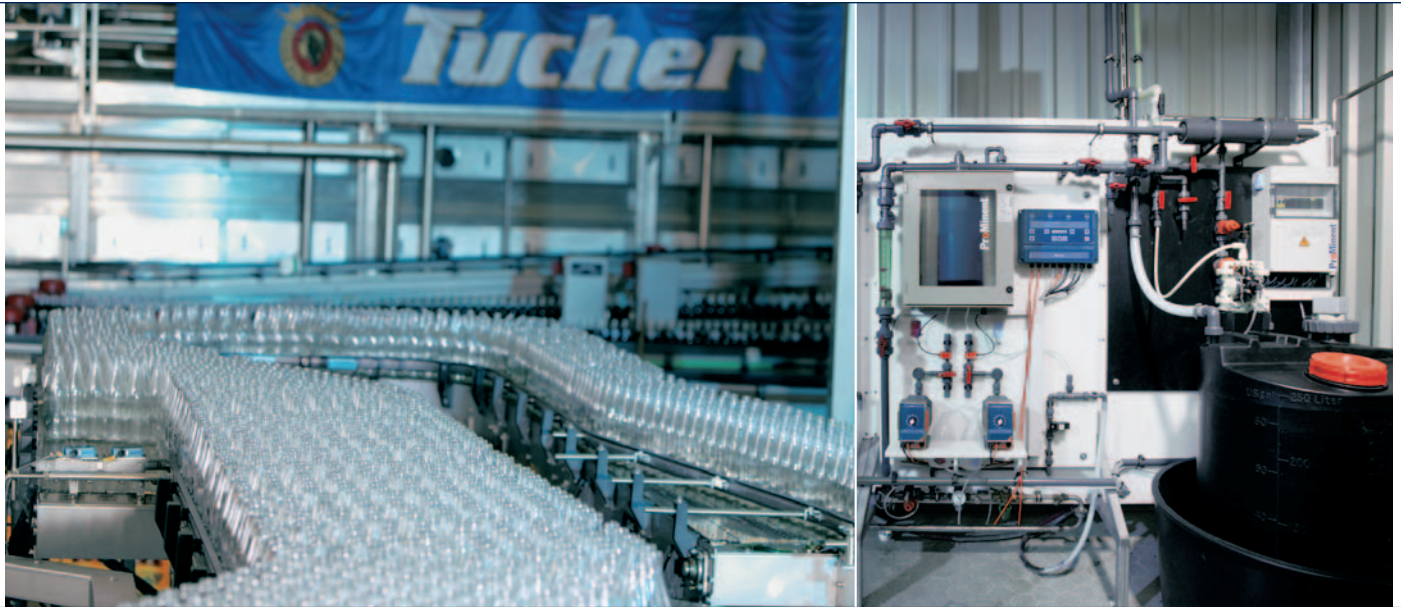
ProMinent reverse osmosis plants produce the ideal dilution water for fruit juice processing. Reverse osmosis operates completely without chemicals and produces ultrapure water for product manufacture.



For more information, visit:
www.prominent.com/beverages

Reference : Tucher Bräu (brewery)

Safe disinfection in beer bottling



„Perfect cooperation – from design to successful approval of the plant“

Georg Rammelmeier, QA manager, Tucher Bräu, Fürth (Germany)

The finest beers are created through traditional brewing methods and through use of the very latest technology. The key to success is experience, not just in brewing, but also in the design of the plant itself. ProMinent supported Tucher from the design stage to commissioning with appropriate and practical solutions.

Challenge

- Water treatment in accordance with the German TwVO (German directive for potable water)
- Microbiological safety in all rinsing and washing processes in the beer bottling process

Solution

- Treatment of water with chlorine dioxide in accordance with the TwVO (German directive for potable water)
- Disinfection of water in the bottle washer and pasteuriser
- Monitoring of the chlorine dioxide addition by DULCOMETER® measurement and control equipment

Customer benefits

- Safe, monitored disinfection of the water and bottles
- Minimal operating costs and optimal operational safety



For more information, visit:
www.prominent.com/references

Reference : Überkingen-Teinach

Hygienic bottling of mineral water



„When we first started working with ProMinent, all we had was an idea. ProMinent has put this idea into practice superbly, through individual design and vast know-how.“

Erwin Gruber, Bottling Plant Manager, Mineralbrunnen Überkingen-Teinach AG, Bad Überkingen (Germany)

Mineral water is enjoying strongly increasing popularity. Hygiene is one of the most important factors here for successful mineral water bottling. ProMinent developed an individual, customised bottling plant design concept for Überkingen, for the hygienic bottling of mineral water. The complete ProMinent package covered supply, installation, commissioning and service.

Challenge

- Elimination of microbiological problems with slime formation in the cold water zone of the bottle washers
- Achieving a microbiologically proper level in all bottle washers
- Replacement of the sodium hypochlorite dosing system by an integrated dosing concept for the entire production area
- Reduction in operating costs
- Bottle disinfection at the rinser (PET)
- Disinfection of fresh water in accordance with the TwVO (German directive for potable water)
- Chlorine dioxide as disinfectant for post-rinse disinfection in a CIP plant
- Online monitoring of the chlorine dioxide addition using DULCOMETER® measurement and control equipment

Solution

- Installation of a central chlorine dioxide production and distribution system to supply the individual applications with chlorine dioxide
- Guaranteed supply of chlorine dioxide by installation of a dual plant
- Disinfection of water in the cold water zone of the bottle washers
- Safe, monitored disinfection of the water, bottles and system components
- Microbiological safety in the water and the system components
- Minimal operating costs and optimal operational safety
- Complete solution from one source, including on-site commissioning

Customer benefits

For more information, visit:
www.prominent.com/references



Global service locally



We offer ProMinent® Service even before you become one of our customers. Our pre-sales services ensure that you get the optimum solution for your individual needs:

- **Advice in choosing the products**
- **Application and process optimisation**
- **Project planning**

However, our commitment does not end with delivery. We offer you a comprehensive after-sales service, which lasts for the entire service life of your equipment.

That maximises your productivity and minimises your operating costs:

- **Assembly/installation**
- **Commissioning**
- **Maintenance**
- **Spare parts service**
- **Repair**
- **Troubleshooting**

Thanks to our worldwide presence in over 100 countries, our service is available wherever you need it.



Further details:
www.prominent.com/service

World-wide contact



ProMinent is at home in more than 100 countries of the world. This guarantees world-wide availability of the products and short distances to the customer. All over the world, ProMinent offers identical quality standards for products and services. ProMinent is where you need it: experience and know-how in water treatment and chemical fluid handling are available world-wide.

For detailed information, please visit our website www.prominent.com

ProMinent Dosiertechnik GmbH

Im Schuhmachergewann 5-11

69123 Heidelberg

Germany

Phone: +49 6221 842-0

Fax: +49 6221 842-419

info@prominent.com

www.prominent.com



ProMinent Dosiertechnik GmbH

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69123 Heidelberg

Germany

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