



taste the quality

TRENDS IN SMOKING

08/2021

THE WHOLE WORLD OF THERMO PROCESS TECHNOLOGY



BRING ON THE ROARING TWENTIES

"With this concept, REICH has positioned itself well for the twenties, and I am sure they will be the Roaring Twenties for us", said Managing Director Tobias Layer at the inauguration of the new building in June 2020.

If you look at the development of REICH Thermoprozesstechnik GmbH since Tobias Layer and Steffen Jaiser took over on 1 July 2013, it is impressive. We were still working in the old buildings in Urbach until autumn 2013. Then, in November 2013, we moved to Schechingen in the Ostalbkreis district, into the new production and administration building with twice the space. However, due to the continuous increase in turnover and the development of the electrical cabinet construction department, the first extension of the new building became necessary in 2016 with a further doubling of the final assembly area as well as the addition of more office space for the significantly increased development and design department.

With the further expansion of the worldwide sales network and the development of new markets in the years 2016 to 2019, the capacity limits were again reached, both in production and in the office and social areas. Work on a comprehensive optimisation and expansion concept for the sheet metal production, final assembly, electrical cabinet construction and warehouse areas commenced at the beginning of 2019. Within this context, all material flows, transport routes and production steps were analysed with the help of specially developed software and then fundamentally revised. The result of these efforts was the expansion of the total production area to around 9,000 m² in 2020 with an optimised material flow, significantly reduced transport routes and consistent digitisation of the processes. In the course of this latest development the cutting capacity in the sheet metal work has been increased by the addition of a further laser cutting machine.

The storage of the sheets was converted to a smart storage system with RFID tracking. Both laser systems can be loaded

and unloaded by one employee at a time thanks to an integrated suction lift system.



In final assembly, too, all larger components are now stored on RFID-tracked load carriers in storage towers provided for this purpose, and all small parts are stored in fully automatic carousel systems. On the additional space gained through the warehouse optimisation, a fully automatic machining centre was installed for the electrical cabinet construction, which has also grown considerably, and which takes over time-consuming manual work on the electrical cabinet housings. All warehouse systems, forklift terminals and the SAP system are operated via warehouse management software specially developed for REICH.



Shortly after the move in summer 2020, the optimisations became noticeable through reduced throughput times and the significantly increased capacity. Bring on the Roaring Twenties!



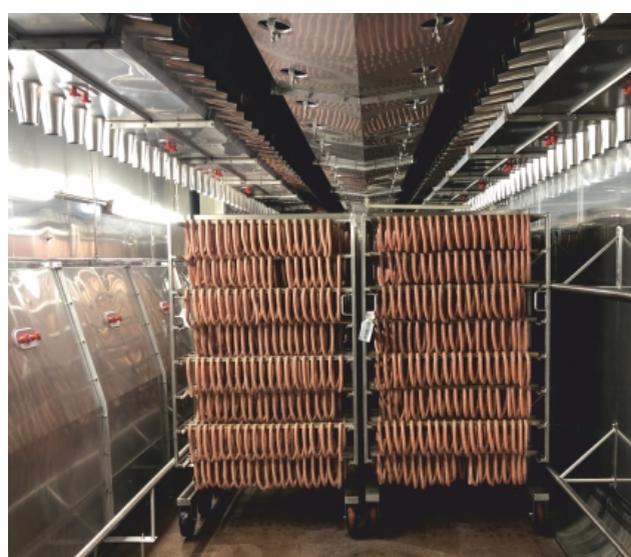
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TRADE FAIR DATES FOR 2021/22

2021 (planned)		
FOOMA, Tokyo, Japan	01-04 June	
ProPak, Bangkok, Thailand	16-19 June	
Foodpro, Sydney, Australia	25-28 July	
Seafood Processing, Barcelona, Spain	07-09 September	
AsiaFoodExpo, Manila, Philippines	September	
Fi Asia, Bangkok, Thailand	15-17 September	
SÜFFA, Stuttgart, Germany	18-20 September	
Evenord, Nuremberg, Germany	25-26 September	
AgroProdMash, Moscow, Russia	04-08 October	
Gulfood Manufacturing, Dubai	07-09 November	
2022 (planned)		
Anuga FoodTec, Cologne, Germany	26-29 April	
IFFA, Frankfurt, Germany	14-19 May	

further dates under: www.reich-germany.de



The REICH AIRMASTER® KKRI-DK ClimaStar

A specialist for thin raw sausages



Consumers are increasingly turning to thin raw sausages. This popular snack item is often taken on leisure trips, hikes or enjoyed by the water and scores points thanks to its advantages. The snacks, which can be kept unrefrigerated and are usually packaged in attractive protective gas packaging, are impressing consumers both in terms of taste and presentation. They are often sold at a pre-defined sales weight, which necessitates precise production.

Whereas in the past an acceptable consistency in the maturing and drying process could only be achieved by moving the smoke trolleys and rehangng the sausages, the REICH AIRMASTER® KKRI-DK ClimaStar series of air-conditioning cold-smoke units make precise production child's play. These

air-conditioning units work with intelligent air flow: During maturing and drying, the products are alternately treated from bottom to top with vertical air inflow and then from top to bottom with horizontal air inflow.

An optimised, programmable alternating flap creates an air roller in the treatment chamber which, especially in multi-row systems, guides the drying air very specifically only through the sausage bundles and not into the undesired free space between the drying trolley and the wall, the so-called "bypass area".

By reversing the drying direction and optimising the flow of air through the smoke trolleys, it is possible to produce the products with minimum standard deviations and thus maximum yield in the entire treatment area, especially with short process times.

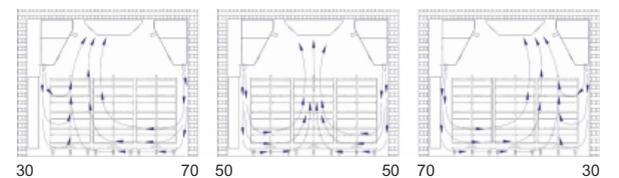
The uniform ripening and drying of the products is not only reflected in the consistent weight loss, but also means that the best-before date can be set more precisely and that the ripening aroma and product quality are evenly formed.

Achieving high weight losses in the shortest possible time often requires a large energy input. But REICH has a good solution for this too: The so-called REICH ECOMIZER. An integrated fresh air enthalpy control in combination with high fresh and discharge air volumes reduce the use of expensive cooling energy to a minimum. As soon as it is possible to mature and dry with

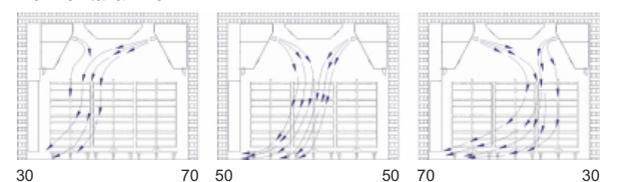
outside air, the fresh air and discharge air flaps open automatically and precisely set the desired climate. This saves expensive cooling energy and protects the environment.

Of course, integrated CIP cleaning is part of the standard scope of delivery. This standardises the cleaning result and at the same time reduces manual labour to a minimum.

Vertical air flow



Horizontal air flow



Steam generator 2.0

Innovative technology for perfect cooking results

At IFFA 2016, REICH presented the new product line of live steam generators for single and multi-trolley systems. The advantages of these fresh steam generators compared to simple steam generation by water spraying are manifold:

- ✓ Faster generation of a saturated steam atmosphere
- ✓ Tender, crisp product casing for sausage products
- ✓ Less product weight loss
- ✓ Shorter process times
- ✓ Significantly reduced water consumption
- ✓ Lower energy consumption due to better heat transfer

It has always been REICH's ambition to continuously improve tried-and-tested concepts and to adapt them to the current, ever faster changing requirements of our customers. For this reason, the design of the latest generation of live steam

generators has been revised in various details. For example, the geometry of the water tank and the arrangement of the heating rods were changed in favour of better heating behaviour. The revised geometry has made the units more compact overall and thus easier to position on site.

Since some customers only have water with a relatively high lime content, the integrated water drain has been optimised so that it is easier to separate the lime residues. In addition, all live steam generators are equipped with their own decalcification unit, via which they can be regularly decalcified fully automatically, depending on the on-site water hardness. This prolongs the service life of the installed elements to the maximum.

All live steam generators are again equipped with the proven CoolTouch technology, but here the cost-intensive cooling via compressed air has been replaced by an energy-saving,

integrated ventilation.

The new REICH live steam generators can be used on systems from one to four trolleys.



Research on individual smoke design

An innovative research project at the University of Hohenheim

REICH supports an innovative research project on the development and application of a new controllable smoking process. The project at the University of Hohenheim is carried out by the departments of Food Material Science and Aroma Chemistry.

Smoking is used in various foodstuffs as a process for producing high-quality products. In addition to fish and meat products as well as vegetarian and vegan alternatives, cheese and vegetables, for example, are increasingly being smoked. This creates specific sensory quality attributes in the products, such as colour, smell, taste and texture.

Different processes can be used to produce smoke, with the smoulder smoke process being the most common. In the smoulder smoke process, the smoke is produced by the thermal

decomposition of the polymers contained in the wood. The smoke is a complex multiphase system consisting of a gas phase with volatile components in which solid particles and condensed liquid particles are dispersed. Depending on the conditions during thermal decomposition – especially oxygen supply and temperature play a major role – the composition of the smoke and thus its properties vary.

The smoke generators currently available on the market are operated under constant system parameters without regulating the smoke generation settings. A controllable smoulder smoke system could enable a flexible smoke design by selectively varying the pyrolysis conditions. Thus, the user can individually adjust the product-specific quality attributes colour, aroma and texture.



Photo: University of Hohenheim, Stuttgart

Kalaneuvos Oy

The largest fish smoking factory in Scandinavia

Strong partners grow together. The 30 million Euro investment by Kalaneuvos more than doubles the production capacity of the company founded in 1975 and makes it the largest smoked fish producer in the Nordic countries. Since 2009, REICH is Kalaneuvos' partner in hot and cold smoking technology and is proud, to be part of this exceptional project.



Sastamala, Finland - The new factory expansion by the largest fish industry operator in Finland, Kalaneuvos Oy, has been commissioned early 2020. The major investment more than doubles the production facilities of the fish processing plant in Sastamala to over 11,000 square metres. Kalaneuvos aims at securing the supply of Finnish fish and increasing eco-friendly food production in Finland. With this expansion, the plant can smoke over 10 million kilograms and fillet over 12 million kilograms of fish a year.

Since the beginning of the cooperation between Kalaneuvos and REICH, five specialized fish smokehouses of the REICH AIRMASTER® UKQ AIRJET series, with the famous and unique REICH horizontal-crossflow-system, have been installed and commissioned at their plant in Sastamala as early as 2009. Already then, all new smokehouses were designed for both hot and cold-smoking processes, combined with intensive cooling functions to quickly cool down ready smoked products at the end of the smoking process. By doing so, the smokehouses deliver ready-to-slice or ready-to-pack products in just one cycle, without any further handling. This technology goes hand-in-hand with the REICH-typical advantages of highest possible product loadings (up to 450 kg of salmon per trolley) and absolute uniformity of the products, thanks to the powerful

REICH-original horizontal-crossflow-system. This unique efficiency and REICH's excellent reputation in the fish industry were just some of the reasons for Mr. Veijo Hukkanen, owner and CEO of Kalaneuvos, to choose REICH to partner also for this big step forward, the company lately completed. Already in 2017, the planning for the new smokehouse expansion began, involving FINNVACUM OY (www.finnvacum.fi), REICH's partner for sales and service in Finland and Sweden. At the end, as a great team success between the experts around Kalaneuvos, FINNVACUM and REICH, eight new REICH AIRMASTER® UKQ 7500 BE smokehouses have been commissioned early 2020. In total, thirteen smokehouses with a capacity of 39 trolleys are now in operation, to produce the growing amount of delicious smoked fish products, mainly salmon, rainbow trout and whitefish. New features of the latest AIRMASTER® UKQ AIRJET generation and a technical facelift of the existing REICH ovens ensure, that the new Kalaneuvos facility is ready for the future. We do not want to miss the chance to say "Thank you!" to the teams of Kalaneuvos and FINNVACUM, for the always pleasant and cooperative partnership.



CONTACT

Kalaneuvos Oy
38220 Sastamala, Finland
www.kalaneuvos.fi



How Der Metzger Schneider scores

No compromise on quality and taste

In 1934, Karl Schneider founded the traditional family business "Der Metzger Schneider" in Stuttgart, which has now spanned four generations. After the Second World War, the newly built head office opened with an additional large kitchen.

Continuously growing, "Der Metzger Schneider" moved into its new EU facility in Freiberg am Neckar in 1992. Under the management of Wolfgang Schneider, the company is developing into one of the most modern businesses in Baden-Württemberg, whose succession is already assured by his sons Kevin and Marc Schneider.

Enjoyment and excellent product quality are top priorities for the company. For perfect meat quality, products are sustainably processed from predominantly regional, certified farms according to the company's own traditional recipes. In addition, attention is paid to the right ingredients, such as high-quality raw and natural spices. "When it comes to quality and food safety, we make no compromises. We guarantee the highest hygiene and food safety with absolute freshness through regular quality controls." Through a carefully planned production chain with precisely defined processes and unrestricted traceability of raw materials and ingredients, "Der Metzger Schneider" meets the internationally recognised IFS-Food safety and quality standard.

In order to meet the high standards in the realisation of the smoke-cooking area, "Der Metzger Schneider" also relies on equipment and expertise from REICH. In a collaborative partnership, every detail was planned and implemented in detail. Thus, two AIRMASTER® UK 5000 BE, two AIRMASTER® UK 2500 BE, one AIRMASTER® KK 5000 BND as well as three K 400 ND cooking kettles are used in the new building.

Products from "Der Metzger Schneider" are appreciated beyond the country's borders. REICH's systems are used to produce a variety of popular typical Swabian specialties, such as Swabian Maultaschen [spinach and meat ravioli], lentils with spaetzle [noodles], butcher's platters and many more. While the lentils are gently cooked in the low-pressure steam boilers, the REICH universal plants guarantee juicy, golden-smoked sausages in tender natural casings. The REICH cooking chambers boil the Maultaschen in a standardised manner with optimum product quality and also guarantee safe post-pasteurisation for all packaged products. During the day, the typical boiled and cooked sausage items as well as cooked cured products are produced, and the integrated climate package enables the production of thin raw sausages, bacon and cold-smoked bellies overnight.

In this way, Metzger Schneider GmbH achieves optimum capacity utilisation with maximum flexibility.



CONTACT

Metzger Schneider GmbH
71691 Freiberg a. N., Germany
www.der-metzger-schneider.de



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News

Successful Master's degree

We warmly congratulate Mr Bastian Keintzel on successfully completing his Master of Engineering degree while working. Mr Keintzel has already been working for REICH as a designer and project engineer since 2015. As part of his Master's thesis, he investigated the requirements of a modern smoke generator, in particular the necessary prerequisites for the smoke design, i.e. the adjustability of certain smoke parameters. From this concept, some features can be found in the new REICH MaxxSmoker G 710 H, while others have been incorporated into the G 505 HF smoke generator, which is used at the University of Hohenheim for further research on the subject of smoke design and smoke components (see page 2).

Dual study programme at REICH

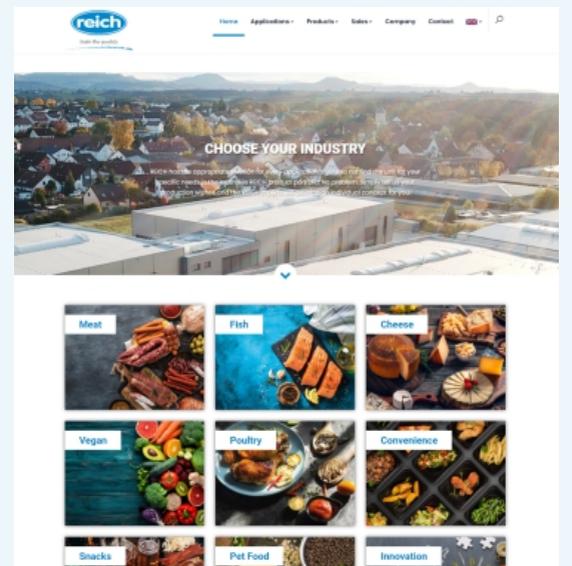
We are pleased to once again welcome a young colleague who has decided to do his education at REICH. Mr Philipp Hald is completing a dual study programme in the field of mechanical engineering at the Duale Hochschule Heidenheim. We wish Mr Hald, who has already been doing the practical module at REICH since October 2020, all the best!

For REICH, junior staff training is an important cornerstone when it comes to securing its future.



Relaunch of the REICH website in 2020

Since autumn 2020, our new website has been online, completely revised in a modern design. Significantly clearer and more user-friendly, visitors can find all relevant information quickly and easily. Supported by lots of visual material, we clearly and transparently document our great passion for high-quality thermo-processing systems.



Visit us online at: www.reich-germany.de
We are looking forward to your visit!

PREFAB for Het Urker Zalmhuys

About striving for creative solutions

Urk in Holland is one of the biggest hotspots of fish processing in Europe. Here you will find old traditional craftsmanship combined with the latest and highest level of food processing technology. Urk is known for having one of the oldest fishing fleets and is now very active in the production of a wide range of fish products, which find their way from Urk into retail worldwide.

Here we also find the salmon processing company Het Urker Zalmhuys that started in 2002 and is known for its high quality of cold and hot smoked salmon. The company has been going through a big growth the last couple of years, which pushed them in extending and rebuilding the complete production and storage facilities of their factory in the middle of Urk. This realization of growth was not always easy and is demanding a high level of flexibility and resourcefulness. One of the biggest challenges was: How can we smoke more salmon, when we are rebuilding at the same time? And an even bigger challenge was: How can we bring a brand new five trolley cross-flow universal smokehouse type REICH AIRMASTER® UKQ AIRJET in the factory, when we have no room? To handle this challenge, we combined the Urker working mentality with the engineering and equipment capabilities of the BAAIJENS (www.baaijens.nl) and REICH teams. The idea: We will install a completely assembled

smokehouse on a big platform, bring it on an even bigger truck to Urk and plant it at the outside wall of the factory. This challenge demanded a careful and intense cooperation between all companies and its people.

With a special transport, we brought a complete steel constructed base frame from Oss in Holland to the factory of REICH in the south of Germany. Onto this base floor, the production team of REICH built the complete smokehouse, including control unit, cooling unit, smoke generator and cleaning, so it could be lifted by a crane as a whole and transported completely for delivery at the Urker Zalmhuys facility. There we used a big crane to place the complete equipment with the base plate on the well-prepared factory grounds. The team of BAAIJENS did the further installing on site and the Urker Zalmhuys' people closed the equipment with hygienic sidewalls and ceiling, resulting in a perfectly hygienic room to produce food. In less than two weeks, Urker Zalmhuys had the possibility to run 24/6 of smoking, with five trollies per batch and a product load on 26 levels per trolley. Like this, they can now achieve the maximum capacity of fish on one trolley and absolutely uniform, perfectly smoked products.

Looking at today' challenges in global food processing, we see this as a case study of getting things done, when you work

closely together. For us, this project as an example and blueprint of how BAAIJENS and REICH are not only handling such a project, but also how we are developing solutions together with our customers.

We do not only improve our products continuously, we also keep developing the ways we can work together and combine a high level of machine performance with excellent service.



CONTACT

Het Urker Zalmhuys
8321 EC Urk, Netherlands
www.heturkerzalmhuys.nl/



Expansion of the REICH customer service

With digitalisation to faster response times

"Do you need a service technician for your plant ASAP? No problem at all – one of our technicians will be in your area tomorrow", says Simon Mayer, Service Manager at REICH, reassuring his customer in a relaxed manner while studying the deployment locations in his digital planning cockpit. This has been standard operating procedure at REICH's customer service centre for some time now, thanks to numerous optimisation measures.

Customer service deployments are usually difficult to plan and

requested at short notice. Customers are dependent on their plant and cannot afford a downtime lasting several days. REICH was confronted with this challenge and has therefore invested massively in its service infrastructure over recent years. Thus, not only the handling of incoming calls but also the dispatch of spare parts has been completely digitised and thus accelerated to a guaranteed same-day delivery. The colleagues in the dispatch department and all service technicians are now digitally connected to SAP to simplify the exchange of information and the

dispatch process. This gives every service technician worldwide access to all documentation and all available spare parts. Urgent information can be sent directly to the respective technician via push messages from the control centre.

Last but not least, the number of service technicians has been significantly increased in the last two years and will be further increased in the future so that REICH can continue to offer fast, reliable and high-quality customer service in the future.

The new REICH technological center

State of the art machinery and equipment from March 2021

Every crisis also brings opportunities, including the ubiquitous coronavirus crisis in 2020 and 2021. Almost all planned trade fairs were cancelled and customer visits with trial production became increasingly difficult, especially from autumn 2020 onwards.

REICH is now taking advantage of the resulting opportunity to modernise the technological center, which dates back to 2013 and no longer meets the increased demands in terms of space and equipment.

For this reason, the REICH team worked out a comprehensive conversion concept together with an architectural firm specialising in the planning of food production plants.

Construction work started at the end of 2020 and will be completed in March 2021. Then REICH will present a selection of different plant types in the new technological center and customer center on the triple area, which will all be fully

functional and can be tested by our customers. "When the decision was made to modernise our technological center, it quickly became clear that we would not only renovate and enlarge the premises and the associated infrastructure, but also completely renew the REICH systems presented there", explains Managing Director Steffen Jaiser.

Thus, in future, interested visitors will have access to both universal systems with vertical air flow and cross-flow universal systems with horizontal air flow, as well as systems for baking and intensive cooling. The universal units are connected to various devices from the REICH smoke generator portfolio. A drying and maturing room is available for raw sausage products. Furthermore, raw as well as finished products can be stored temporarily in a cooling room.

All the installed equipment is interconnected and the process parameters are visualised on a screen. Thanks to the specially

designed lighting and multimedia concept, not only trial productions but also specialist conferences and training seminars can be held in the new technological center for our customers.

The REICH team is looking forward to your visit!



The technological center under construction January 2021



REICH Thermoprozesstechnik GmbH

Kappelweg 20
73579 Schechingen, Germany
Tel: +49 (0) 7175 99 790 0
Fax: +49 (0) 7175 99 790 11
Mail: sales@reich-germany.de
Web: www.reich-germany.de



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