

HIGH LIGHT



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EDITORIAL



Sometimes situations occur in a miracle way without being planned. The repetition of the following events is such a pure coincidence:

It was in the year 2014 when we were facing an interpack trade fair year and, at the same time, the construction work for the new, 1,000 square metres large assembly hall was in full progress.

Three years later we are again facing an interpack trade exhibition year and again, a department can look forward to an extension of space. This time it is the parts manufacture which will be expanded by 1,050 square metres.

You could get the impression that Grunwald was a construction company. A company which only builds machines in order to fill the new big halls with life. But no, this is a joke, of course! With heart and soul we are machine builders! The fact that we are expanding our operational space while production is in full progress is indispensable. This is due to the good order situation and our success on the world market. But first of all, we are committed to our customers and the trust they have in us.

On page 10 and 11 of this HIGHLIGHT edition we compiled the figures and photos on the latest plant extensions.

Preparations for the **interpack exhibition** started long ago. It is a matter of course that we will participate when trends in the international packaging industry will be presented in Düsseldorf in May for seven days. We will show our new developments and technical highlights in **hall 6, stand 6D02** based on the example of three highly interesting rotary-type and inline machines. You may be assured: We will have several ideas on board which will surprise you!

Come and visit us in Düsseldorf! You have the product – we have the technology to realise your filling applications! Because – we will always find a way!

We look forward to seeing you as well as to inspiring, interesting conversations in Düsseldorf!

Yours
Ralf Müller
and the GRUNWALD team

COVER

It takes longer for spring to come in the Allgäu than in other regions but when it comes it is the more intensive. It is the time when the dandelions blossom and the pastures are covered with its yellow flowers. A view which we, the "natives" fully enjoy after each long winter.

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Ideas to surprise you!

Welcome to the GRUNWALD Alpine Pasture in Duesseldorf in hall 6, stand 6D02!

You have the product – we have the technology!

Ask us for our various solutions and current new developments! Our team will be pleased to show you the technical sophistications and the numerous options of our filling, dosing and packing machines based on the example of this year's exhibition machines.

- **GRUNWALD-FOODLINER UC, 8-lane**
Linear cup filler with **new ultraclean hygiene concept**
- **GRUNWALD-ROTARY XL, 1-lane**
High-performance bucket filler – rotary-type machine independent of formats which hardly needs any change parts
- **GRUNWALD-HITTPAC AKH-019SE, 2-lane**
Rotary-type cup filler with **integrated inline fruit mixer**

Visit our stand in **hall 6, stand 6D02**. Benefit from informative conversations in our traditional beer garden and enjoy the pleasant atmosphere of the GRUNWALD Alpine pasture. We will pull out all the stops to make your visit to the GRUNWALD stand a complete success.

We look forward to seeing you.

interpack
Hall 6, stand 6D02
04 - 10 May 2017, Duesseldorf/Germany



High-performance cup filler for the Arla competence centre in Upahl

GRUNWALD-FOODLINER 3.000 – for filling new types of product and even more flavour

INFO

Arla attach great value to emphasising that they are a cooperative whose members are not only suppliers but even owners of Arla Foods. At present approx. 12,000 farmers are practising sustainable agriculture on behalf of Arla and pass on the objectives of Arla to 19,025 employees in 133 dairies. Thus all Arla farmers are at the same time owners of Arla Foods, one of the biggest dairy cooperatives worldwide.

Arla in Europe

The first dairy cooperative was founded in 1882. In 2000 the biggest dairy cooperative in Denmark, MD Foods, merged with the Swedish counterpart Arla Mejeriförening. In 2011 for the first time dairies in Germany and Great Britain merged with Hansa Milch eG. Thus the product range in Germany was amplified by many fresh products such as yoghurt and quark.

Arla location Upahl

Approx. 500 of the 19,025 employees of Arla Foods worldwide are working in the north-western part of Mecklenburg-Vorpommern, in the community Upahl. Arla Foods in Upahl is the competence centre for bio products and quark. There they produce fermented fresh products. One of these fresh products, that is to say Skyr, is even exclusively produced for Europe in Upahl. www.arlafoods.de



The photo below gives the impression that a toy crane is cranked up. Hard to believe that actually a machine nearly 11 metres high and eight tons heavy is hanging on the hook.

The ingress of the machine to the production site in Upahl was as exciting as the specification from Arla for this project was highly-interesting – but first things first.

The shipment of this inline machine was really special! Due to its shipping dimensions with a length of nearly 11 metres, a width of 2.60 metres and a height of 3.60 metres this machine utterly was too high, too wide and too long for a standard heavy goods vehicle with tarpaulin. Even though many components were disassembled – this FOODLINER could only be loaded onto a telescopic low-loading truck with tarpaulin – that is a special vehicle. A second vehicle with tarpaulin was required for the components disassembled and all further machine parts.

The heavy goods vehicle was directly loaded at the assembly location of the machine. The low-loading truck with tarpaulin who had a height of 4 metres moved into the assembly hall until it was standing in a parallel way to the machine. Then precision work and good communication between all the people involved in the loading was necessary in order to position the machine precisely on the low-loading truck.

The unloading of the FOODLINER in Upahl could only be made via crane. The customer already had removed two elements of the roof for the machine ingress in the building. For lifting the machine with a weight of approx. 8 tons a heavy-duty crane of 500 tons with a range of 58 metres was used.

What looks like a game on the photo was in fact a nail-biting affair for all parties involved. On the day of the machine unloading the Ger-

man Weather Service had released a severe weather warning. Strong winds and squalls up to 88 km/h (which corresponds to wind force 8 – 9) were forecasted – and this came true! The unloading was impossible under such conditions! In case of such wind forces even elements with a weight of eight tons would become a swinging pendulum! After a waiting time of four days everybody could breathe: the storm had calmed down and the unloading could be started.

Together we can do it much better!

This FOODLINER cup filling machine is the third filling machine GRUNWALD have supplied



and commissioned within only two years for the Arla location in Upahl. Within this period a very close teamwork developed between the colleagues involved. Cooperations were created and many accurately fitting optimisations for Arla.

This good cooperation was also very important for establishing the HACCP concept (Hazard Analysis and Critical Control Points) resp. the in-house control system for hygiene. In the end, it had to be guaranteed that all products filled can be consumed and do not pose a health hazard. Therefore the risks which are associated to the manufacturing process of food have to be considered and the risks have to be assessed. Negative factors have to be recognised and eliminated by taking the corresponding countermeasures. This was just one of the measures for a successful production which was implemented mutually.

The accompanying support of our newest department "project management" has proved of value once again. Markus Berte

has been responsible for this project from the very beginning. He was the responsible contact person from the design up to the final acceptance. He was the contact person for all concerns related to this project. This was an advantage for everyone at Arla and Grunwald.

We thank all persons at Arla who were responsible and involved in this project for the confidence placed in Grunwald. Thanks for the positive and always pleasant cooperation. We already look forward to the next challenge and the next mutual project.

Photo on the left: SKYR – one of the new products from Arla, filled on the cup filler type FOODLINER supplied

Highly exciting unloading situation in Upahl, photograph taken by our colleague Stefan Natterer

Photo below: Overall view of the GRUNWALD-FOODLINER 3.000/2-lane supplied



DETAILS ON THE MACHINE

Details on the 2-lane cup filler GRUNWALD-FOODLINER 3.000 designed for filling quark, skyr and rich quark in 1 kg buckets with handle with snap-on lid tamper evident closure:

- user-friendly, 2-lane storage with traverse unit; storage time up to 12 minutes.
- cup storage in sloped design for considerably higher bucket stacks
- this cup filler can be retrofitted with a cutting/sealing station for future expansion of the product range
- space-saving snap-on lid press-on station with integrated leak test control
- servo-driven dosing piston for optimum adjustment of the dosing accuracy
- inline weighing for guaranteed precise filling weight of each cup
- integrated ink-jet printer
- Handle orientation station guarantees the failure-free further handling of the buckets in the carton tray
- Packing material sterilisation by means of pulsed UV(C) high-performance radiators for maximum elimination of microbes and bacteria
- Guaranteed killing rate of at least LOG 4 for all standard cup sizes of the dairy industry, sometimes ≥ LOG 5, at maximum cycle speed (testing laboratory SGS Institute Fresenius GmbH with reference germ bacillus atrophaeus ATCC9372)
- integrated case packer

CONTACT

If you are interested in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us.

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Simply the best for delicatessen salads

"We are proud of handling the most delicate ingredients "

INFO

Johma have just been using superior ingredients from the very beginning. And from the very beginning the production of their salads has been aimed at being the most tasty ones!

The company's history began in the year 1968 when the founders Johan and Martin started their salad production in a garage in Glanerbrug (a town near Enschede Twente). They quickly decided on the company's name by combining their first names. Their first customers were butchers and small supermarkets in the east of the Netherlands.

From the very beginning the growth was positive. In the middle of the 70's Johma had experienced such a considerable growth that a bigger building was required. They found this building a few kilometres away from Losser. Today the community of Losser comprises slightly more than 22,000 residents and is located in the east of the region Twente.

With "Twente" – the translation means "simpatico, hardworking, honest" – many innovations were launched in a very customer-friendly way. In the years 2010 and 2011 Johma revised their recipes, their packaging and thus their corporate identity. Under the name of "Johma oet Twente" this company proudly presents its roots. www.johma.nl

When talking about delicatessen salads in the Netherlands, there is no way around "Johma". Since 1968 the biggest and most well-known producer in the Netherlands – Johma – has been producing delicious delicatessen salads in Losser which is directly located at the German border.

For almost 50 years they have been making production history here! The cooperation between GRUNWALD and Johma has also been a long and very successful history. It began in 1990 when GRUNWALD supplied the first 4-lane GRUNWALD-ROTARY 10.000 to Johma.

From the very beginning there has been a very close and trusting cooperation between the two companies which was underpinned by the delivery of 10 additional machines.

It was therefore no surprise that Johma contacted us approx. 1 ½ years ago when they required a very flexible machine for filling delicatessen salads in 3 different plastic cups. Great value was attached to a quick format changeover as also the same type of salad had to be filled in different containers. Thus the product change including time-consuming cleaning was no longer necessary. The solution for this filling application presented by Grunwald which was based on our rotary-type cup filling machines immediately convinced the persons responsible at Johma.

Adequate technology!

The 4-lane ROTARY 20.000 supplied recently is ideally equipped to meet the required flexibility of the production process. It has a double advance feed of the rotary table which means the cup slats for two different cup sizes are positioned alternately on the rotary table. Due to the servo drive for the cup advance feed the corresponding cup slat for the cup size selected on the panel is therefore automatically precisely positioned underneath the stations. As there are two cups with quite similar external dimensions they can be handled with the same cup slats due to their special design. Thus the exchange of the cup slats is not necessary in case of a format changeover.

In addition this machine is equipped with two cup setters and two heat sealing stations. The format changeover is actuated by the push of a button as well. The cups which are not required can even remain in the magazine while the second format is handled. The proceeding with the lids is similar. The stationary mounted magazines including denesting mechanism are automatically moved to the position required. Therefore a format changeover is also no longer necessary.

These are technically sophisticated solutions which are very convenient for the operators: They can carry out the format changeover within 2 – 3 minutes without using tools. Time-consuming adjustments and settings are no longer necessary. The complete unit for

each cup size has already been mounted and precisely adjusted.

This rotary-type machine offers a high level of flexibility – be aware – at a production speed of up to **11,000 cups/h.**

Our specialists once again handled this order in close cooperation with the persons responsible at Johma. This guarantees optimum results for daily practice and maximum customer satisfaction.

We thank Johma very much for the confidence placed in Grunwald and for the very good and amicable cooperation.

DETAILS ON THE MACHINE

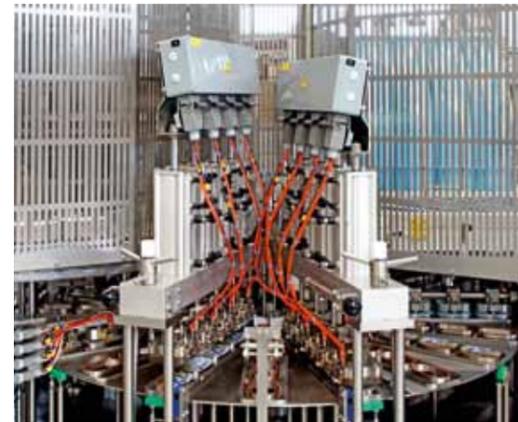
GRUNWALD-ROTARY 20.000

Dimensions: 2,300 x 2,300 mm
4- to 6-lane version

Approximately 12,000 – 18,000 cups/h depending on product and packaging material

2 x 3-lane up to 2 x 4-lane versions
Approximately 15,000 – 20,000 cups/h depending on product and packaging material

Dosing range: 10 – 1,000 ml



In order to achieve high flexibility and quick format changeover: two heat sealing stations mounted on the opposite side. They are easily selected by the push of a button.

CONTACT

If you are interested in these cup filling machines and in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us. For further information, please contact:

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1 machine – 1,000 options

Rotary-type machine for maximum flexibility

Rotary-type and inline machines are subject to higher and higher requirements. In order to provide the required variety of the numerous filling tasks new ideas are necessary. Technology must fit.

Innovative ideas and the appropriate technology were once again requested when we received a very interesting enquiry from Russia via our representative Matimex. This customer asked for a filling machine which provides the user with extensive possibilities for filling its products.

Versatility is our strength

We developed a highly format flexible 2-lane rotary-type machine based on a GRUNWALD-HITTPAC AKH-059, which meets all filling requirements desired.

- Filling of different dairy products
 - smetana,
 - buttermilk and
 - yoghurt with fruit layer

- Filling in different round cups of
 - Ø 75 mm and
 - Ø 95 mm as well as
 - 2-chamber cup Ø 95 mm
- to be sealed with pre-cut aluminium foil seal lids
- handling of a round cup with top cap filled with cereals (Ø 95 mm), as and when required.
- Apart from that lidding with snap-on lids. .

A variety of product presentations is possible on this rotary-type machine as this machine is equipped with two mobile dosing machines in addition to the main filling station in CIP design.

First of all the SEMIDOS VT which can optionally be used as a pre-filler or main filler for filling

- fruit layer
- a 2-chamber cup but it is also suitable
- for the post filling of fruit or topping.

The cereal filler will be used for filling

- a 2-chamber cup or
- top caps or
- as a post filler for decorating filled cups instead of filling the above-mentioned products.

Maximum hygiene standards

The features of this cup filling machine meet all hygiene requirements of a modern dairy.

- Packing material sterilisation via pulsed UV(C) high-performance radiators
- Rotary-type machine covered with a laminar cabin clean room class 5
- Main filler in CIP design.

The different dosage options provide the customer with a broad range of dosing varieties and product presentations with the same machine size.

One very interesting and important aspect was that different dairy products in different varieties can be filled with the new cup filler on the one hand and that, on the other hand, top caps can be produced ourselves. This allows a very independent production of different products

Filling top caps in an independent and variable way

There is a solution to any task! In this case it was the idea of an independent top cap production. Due to the quick-change system developed by GRUNWALD the format parts can be exchanged very easily and quickly as well as in a time-saving way when changing from "normal" cups to "top caps". Identical to snap-on lids the empty top cap lids are fed from the cup magazine, filled with cereals and then stored until further processing. In case that the cups should be closed with a top cap the filled top cap lids are automatically fed and snapped on the filled yoghurt cups.

This unique machine concept offers the operator the highest degree of format and production flexibility – at a high degree of machine availability and with a minimum of space requirements. In addition it offers great independence with regard to the filling of the top caps and selection of the ingredients used.

In summary this rotary-type machine guarantees enormous flexibility due to its technical sophistication. In combination with our mobile additional equipment our customers can now avail themselves of a wide range of possibilities in order to plan the daily production in an ideal, rapid, flexible and reliable way.



DETAILS ON THE MACHINE

GRUNWALD-HITTPAC AKH-059

Width of the machine: 1,750 x 1,750 mm

1- to 4-lane version

Approximately 2,500 – 10,000 cups/h depending on product and packaging material

Dosing range: 10 – 2,000 ml



Mobile GRUNWALD dosing systems are suitable for pumpable products and products which are able to trickle. The photo shows two mobile fillers used as decorating stations on a 4-lane rotary-type cup filling machine GRUNWALD-ROTARY 20.000.

CONTACT

If you are interested in this rotary-type filling machine and in receiving further information or if you are looking for a solution for your filling application please do not hesitate to contact us.

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Photo on the left:

Unique machine solution for the dairy industry:
2-lane cup filling machine

GRUNWALD-HITTPAC AKH-059 with two mobile dosing systems SEMIDOS VT in horizontal design, a cereal filler as well as with an external feeding system with a sorting drum for feeding filled top caps (on the right)

Ideas for the future

The eighth extension of the building since the company was founded has now been completed

GRUNWALD NEWS

In the past 10 years we have expanded the factory space at increasingly short intervals.

2007: Completion of a hall with a size of 1,000 square metres for the parts manufacture.
2008: Extension of the assembly hall by 600 square metres for assembling machines.

In **2011** it really started! Within two years the so far biggest building – the new building – was erected without interrupting business activities and without any interruption of the building activities. Thus, the factory space was increased by approx. 60 % to 6,800 square metres in total. The new building is mainly destined for the design department, storage, administration and assembly department.

In summer 2013 when the building work was completed we actually thought that the company space of 6,800 square metres would be sufficient for a while. But mostly things develop differently from what you expect!

In **2014** the slogan therefore was "continue to build"! The reason was that – fortunately – the orders for inline machines were strongly increasing. It was clear: We will have to make sure that our customers will be supplied in a reliable way in the future as well! It was therefore imperative to meet the increasing requirements and to create the space necessary for the assembly of inline machines. Hence, part of the parking space was converted into an assembly hall with a size of 600 square metres – our assembly hall no. 3 was built.

Building for now and for the future

Up to that point we have really built a lot – and we still need further space! Especially in our production department space has become tight. Our flexible, technically

The photo on the right shows the previous size of the hall for parts manufacture. Due to the extension of the hall the external wall (shown on the right of the photo) no longer exists. Today there are sliding fire doors at this spot which separate the halls, if required.

sophisticated and high-quality cup and bucket filling machines need high-quality production and manufacturing technology. Therefore 70 – 80 % of all quality-related parts are manufactured in-house.

In order to meet the latest standards of production technology we are continuously investing in highly modern, efficient machines. A sum of more than 400,000 Euro was invested in one of the biggest milling machines worldwide in summer 2016, a long barrow milling machine with integrated NC circular table, a X-travelling distance of up to 1,800 mm and 60 tool places – to only mention a few data of this chipping miracle. (see report in our Highlight brochure No. 33). At the beginning of this year an additional chipping machine was purchased. Another milling machine was delivered at the end of March.

You probably already guess! Expansion of the machine park to such an extent needs space! Consequently, the production hall which was built 10 years ago, was expanded by a 30 m x 35 m building.



The purchase of these production machines increased the capacity of the parts manufacture by 30%. This increase in capacity guarantees that the machine components required can be manufactured in a flexible, reliable and prompt way at any time. The rotary-type and inline machines ordered can be assembled without interruption. Our customers will benefit from short delivery times.

Half of the 1,050 square metres large hall will be used by the chipping manufacture. The other half which is still being used for bulk parts storage will also be available for the chipping parts manufacture in the future. In the end this would mean double the space for this department.

Welding and sheet metal forming will benefit from the transfer of the chipping machines to the new hall. There is now three times as much space and enough room for the employees.

Installations according to „Plug and Play“

The new production hall did not only create more space. It was built to that effect that it can be used optimally for future changes.

A highly modern circular power rail system was installed which replaces the normally customary electric wiring. Due to this circular system production machines can be installed rapidly at any location in the hall according to the "plug and play" technology saving time and costs, i.e. no cables to be pulled, no long supply lines and no expensive installation of fuse boxes.

The new production hall has got a lot to offer because the machines run at maximum performance every day. The input lead to the electric control cabinet amounts to 630 amperes.

With our 400 volt power supply system this results in a performance of 250,000 watts. This corresponds to 5 times the amount of power consumed in comparison to a customary household.

Even in places where much power is needed there are possibilities to reduce the consumption of power. Grunwald, e.g. completely converted the lighting of production halls, of working areas as well as offices to LED technology. This means a



2/3 saving of power compared to the former consumption. A really impressive result!

Plans for the future

Grunwald is a sound company. Cautious planning and using the opportunities for purchasing adjacent property contributed to the fact that Grunwald was able to grow at the location Atzenberg in all those years. Thus we have been able to quadruple the company space in the past 10 years to a current 8,450 square metres. The built-up area is located on a site area of 20,000 square metres.

To those who read our Highlight brochures attentively we can already now reveal a secret: The next construction project is already approaching! The schemes are ready and the permit procedures required by the authorities are to be initiated soon. An area of 1,400 square metres is designated for the building. As we will build 2 or 3 floors high a floor space of 3,500 square metres will be created. We will keep you informed on the progress of this construction project.



The 6 metre and 15 ton gantry type milling machine type DMF 180 which was supplied in October has been transferred to the hall. On the right you can see the 3-axial universal milling machine DMU 60 monoBLOCK®. The machines are operated by our employees Markus Rehm (on the left) and Frank Hofmann.



An excellent snapshot captured of Bernd Martin, head of the production department. He is glad about the new large hall in which there is enough space for the meanwhile 15 employees (one of whom is an apprentice) and for all manufacturing and chipping machines.

The picture on the left shows the newly built hall. At the moment half of it is used by the chipping manufacture. The other half of the hall which is now being used for bulk parts storage is separated optically by three large-size mesh plane covers.

GRUNWALD NEWS

In autumn last year we received the letter of the initiative "awamu - Zusammen für Uganda e.V." (together for Uganda) in Wangen. Margareta Riese, head of this initiative in Wangen requested the readers to have an "open ear and heart". She informed them that the hospital and maternity ward in Bukomansimbi/Uganda, which is excellently run, is in need of a total of 5,000 €. This money was necessary to buy a small laboratory and the laboratory equipment. Moreover the labour costs for a laboratory and administrative clerk



for a period of 1 year should be financed thereby.

We spontaneously decided to take over the costs within our annual donation for a beneficial purpose. We already reported about this in our December issue of our HIGHLIGHT brochure.

What came out of it?

In October trees were cut down and soon after the area developed into a construction site. During the turn of the year a lot of work was done so that the laboratory could be finished and equipped as early as the beginning of January.

GRUNWALD donated EUR 5.000,00 for Uganda – and here are the results....

Meanwhile the laboratory has long since been taken into operation. Finally, the necessary examinations, above all diagnosis of malaria, can be made directly in the hospital ward in Bukomansimbi and the patients suffering from a fever can be treated accordingly. A large number of patients no longer have to be sent to far-away hospitals. The construction of this laboratory is another large step for the population in Bukomansimbi .

A visit from Uganda

The couple Maria Goretti and Emmanuel Musoke from Masaka/Uganda gave us a report when they visited us in February on the occasion of their trip to Germany on how glad people are about this laboratory and how important the support of Wangen is. The two are very important and reliable partners for awamu - Zusammen für Uganda e.V.". They are the local contact and a link between the cultures. But most of all they guarantee that the money donated will arrive where it is supposed to be and for the purpose it was donated, i.e. in the projects and with the people!

Emmanuel and Maria Goretti Musoke continuously reported about the current situation in Uganda during their visits and in many evening events. They talked about life in a country whose population has a life expectancy of 53 years and whose average age is 15 years. They reported on the life of the people and the future perspectives of children and adolescents if the gross yearly income amounts to 340 US \$.



But it is also important for them to personally say thank you for the support and to get to know the people who helped them with the money donated.

We were very happy that Emmanuel and Maria Goretti found the time to visit us despite their full timetable. We wish them all the best and further success for the many projects in Uganda.

*Photos top left:
The laboratory is still under construction.*

Photo at the top: The new laboratory has been completed, furnished and put into operation.

*Photo at the bottom:
Souvenir photo taken in the assembly hall during the company tour; from left to right:
Eberhard and Margareta Riese (awamu),
Emmanuel Musoke (Uganda),
Edwin Müller (Grunwald),
Maria Goretti Musoke (Uganda)
Marlies Hodrius (Grunwald)*

